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ABSTRACT

Award-winning teacher-developed projects and courses in economics are described. The projects are designed for use in grades K-12. Descriptions indicate grade level, project background, time allotment, objectives, activities, and evaluation. Chapter 1 suggests ways to teach economic concepts in grades K-3. The projects included a year-long study of two agricultural products of Arkansas--chickens and rice--and the effect these two products have on students' daily lives, teaching economics through an Easter theme, a unit about money, and a third-grade lesson on common property resources. In the projects described in the second chapter, students in grades 4-6 study about productive resources from prehistoric to modern times, international trade, and interdependence, and create their own country. The junior high projects of the third chapter deal with lifestyles, world trade, and a class developed money system. Projects for the senior-high level in chapter 4 focus on capitalism and entrepreneurs and involve students in reading utopian literature. The concluding chapter describes projects that fit into what is called an "open category." Included are strategies for using economics in a media center, an economics curriculum guide, an application of the Program for Effective Teaching (PET) to a system-wide approach to teaching economics, and a description of classroom materials developed to teach about the economics of the American food system. (RM)

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ECONOMIC EDUCATION EXPERIENCES OF ENTERPRISING TEACHERS

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Edited by Andrew T. Nappi and Anthony F. Suglia

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A report developed by the
Joint Council on Economic Education
From the 1981-82 entries in
The International Paper Company Foundation
Awards Program for the Teaching of Economics

VOLUME

20

JCEE CHECKLIST NO. 328

TO OUR READERS

The accounts published in this book are condensed versions of the original projects. Copies of the complete reports can be obtained from:

National Depository for Economic Education
Awards
Milner Library 184
Illinois State University
Normal, Illinois 61761

This volume of award-winning lessons has been exempted from review by the Publications Committee of the Joint Council on Economic Education because a panel of educators has judged the contents.

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Foreword

Far too often students who have studied economics can define key concepts and terminology in a parrotlike manner, but are unable to apply them to real-world problems. This is one reason why the Joint Council on Economic Education and its network of affiliates—50 state councils and more than 230 college and university centers for economic education—emphasize economics as an approach to decision making and problem solving. In doing so, the JCEE also lays stress on the ability to devise and weigh alternative solutions to economic problems and to evaluate the results.

The National Awards Program for the Teaching of Economics, which is funded by the International Paper Company Foundation and administered by the Joint Council, is a notable example of the aforementioned efforts.

The quality of entries submitted to the competition by innovative and imaginative teachers is evidence that the education profession is delivering effective economic education programs in the classroom. Students learn to use economic concepts as they analyze economic issues and problems. The effect is to encourage students to think for themselves in a rational manner.

This, the twentieth in the series of booklets on Economic Education Experiences of Enterprising Teachers, abstracts and describes the projects selected for awards by the judges. All the projects are imaginative and creative, all are unique, and all are offered to other educators as examples of effective and successful methods with which to teach economic concepts in the classroom.

A publication of this nature requires the involvement, assistance, and support of others. In particular, we extend our appreciation to those who served as judges in 1982. Our distinguished panel included Dr. George L. Dawson, professor of economics and director of the Center for Economic Education at Empire State College (SUNY); Dr. George L. Ferish, former associate director of the Joint Council and currently one of its field consultants; Dr. Delmas F. Miller, executive director of the West Virginia Secondary School Principals Association and a former president of the National Association of Secondary School Principals; Dr. Laurence E. Leamer, former director of the Center for Economic Education, SUNY-Binghamton; Dr. Andrew T. Nappi, Dean of the College of Business, Illinois State University; Dr. Jeannine Swift Solar, associate professor and associate dean, Hofstra University, New York; Dr. Joseph F. Talerico, professor of economics and department chairman, Rider College, New Jersey; Dr. Henry H. Villard editor-emeritus, *Journal of Economic Education*; Ms. Dorothy Cowles Wass, elementary economic education consultant; and Dr. Philmore Wass, former chairman of the Department of Foundations and Curriculum, School of Education, University of Connecticut. We are privileged that these individuals have accepted the challenges involved in selecting the awards recipients from among the 300 entrants. Their professionalism is greatly appreciated.

The Joint Council staff has again responded with its unqualified support of the National Awards Program. Dr. Michael A. MacDowell, president, has been most conscientious in his personal involvement, interest, and counsel. His advice always serves to improve the total program. Two members of the Affiliated Councils and Centers Division deserve special recognition: Robert A. Greczek assumed responsibility for many of the "nuts and bolts" aspects of the program, and Claire Moe, the division secretary, handled many of the typing, filing, and clerical responsibilities. The editors are grateful to all three.

The Joint Council is indebted to the International Paper Company Foundation (IPCF) and in particular to Ms. Gladys F. Waltemade, its vice-president, and Ms. Sandra L. Kuntz, her predecessor, for the support they have provided to the National Awards Program and for their interest and involvement in it. Their commitment makes the program a reality. We would also like to express the appreciation of the nation's educators for the foundation's efforts to offer special recognition to outstanding classroom teachers.

The challenges inherent in publishing this annual booklet are considerable. We are most fortunate that Dr. Andrew T. Nappi has again agreed to serve as co-editor. His long experience and involvement in economic education helps assure a publication of high quality and we are deeply grateful for his services on behalf of the National Awards Program.

Finally, we are pleased to report that the Twentieth Annual National Awards Program was a success and are delighted to congratulate the 94 educators whose efforts are recognized in this publication.

Anthony F. Suglia
Director, Affiliated Councils and
Centers Division
Coordinator, National Awards Program

Editor's Introduction

The reports published in this book are condensed versions of the original projects, some of which cannot be presented or even summarized easily. The attempt in Volume 20—as in its predecessors—is to provide brief descriptions of the winning entries which capture the essence of the teaching projects. I am confident that teachers who have submitted projects but failed to win will be helped by the following summary of the characteristics of the winning entries.

1. *The project should include a succinct statement of the goals or learning objectives, both cognitive and affective.* The list of objectives need not be long; it should, rather, be clearly articulated and related to the instructional program. Statements of objectives help the judges gauge the worth and effectiveness of the entry.

2. *The judges should be able to discern how each unit, lesson, method, or activity in the project helps to develop economic concepts and generalizations.* That does not mean that mathematical, writing, reading, or other skills are not important, but simply that awards must go to entrants who focus on the teaching and learning of economics.

3. *The procedures and sequence of activities should be well-organized and clearly described.* This portion of a report should emphasize the materials, time schedule, introductory procedures, assignments, activities or strategies, and the review process.

Motivational technique must be spelled out and instructional activities described in detail. How did the teacher get the pupils interested in the ideas to be taught? How was the lesson, unit, course, or subject begun? The duration of the project should be given at the beginning: a year, a semester, a few weeks, a single lesson, or whatever. If less than a full course, the author should describe how the project fitted into the curriculum being taught and how it was related to the preceding or following material.

4. *Winning entries should clearly describe the instructional environment and class situation.* The judges want to know the ages, ability levels, or special characteristics of the students. If the project was developed for a particular socioeconomic or ethnic group, the judges must be informed.

5. *A precise account of the teaching techniques used should be given.* The basic purpose of the Awards Program is to help other teachers, and that can be achieved only if the author gives a detailed account of the methods employed. For example, it is not enough simply to say that a resource speaker was used. Rather, the reader should be told exactly how the speaker presented economic ideas, what follow-up activities were conducted, how these activities fitted into the total project, how the endeavor was evaluated, and so on. Where appropriate, sample lesson plans should be included, along with assignment sheets, instructions passed out to students, and the like. Complete details about the personnel and material used should be included in the report.

6. *The project should show originality.* It ought to be more than a rehash of someone else's work. At the least, it should give an entirely "new twist" to an idea developed in a previous year. While ideas that captured awards in years past may still be good, the awards must go to those who develop fresh ideas for teaching economics.

7. *Photographs or samples should be included in lieu of student work, bulletin board arrangements, table displays, murals, and other items that cannot be shipped.* It is not necessary to submit large or bulky material if a photograph will suffice. Neither is it necessary to send in everything the students have done. A few examples—one or two typical term papers, for instance—will do.

8. *The procedure for the project should be explained in terms of the three basic constituents of every good teaching unit.* The first helps to get the pupils interested in the unit, project, or lesson; the second develops the ideas, concepts, skills, and attitudes that are the goals of the activity; the third brings the activity to a close by summarizing and applying what was taught. Plays, assembly programs, displays, field trips, the making of filmstrips, simulations, and many other devices can be used to help conclude a unit.

9. *Evaluation techniques should always be submitted.* These generally include tests of various types (e.g., short-answer, essay, performance) but can also include less formal methods, such as self-evaluations by individuals, groups, or the class; written or oral evaluations by outsiders; and observations of pupil behavior. The testing instruments along with the results should be submitted with the entries.

10. Finally, *entrants should pay attention to the requirements set forth in the Awards Program application form, arrange the material in an orderly fashion, and help the judges by presenting their entries as neatly as possible.*

An educator whose submission has the ten characteristics listed above will have a good chance of winning. It should be noted, however, that the competition is keen, and that each year it becomes more difficult to win than the year before. Prospective entrants would be well advised to seek outside comments and criticisms before submitting their projects. In particular, a teacher with little formal training in economics should consult an economist about the accuracy and appropriateness of the economics used. Many projects represent an enormous expenditure of time and effort and contain superb ideas and materials for teaching, but nevertheless fail to capture an award because they contain little or no economics or because the economics content is inaccurate.

It might be well for a contestant to review the suggestions below prior to preparing an application. Almost any logical and descriptive outline will serve as a guide for writing the narrative section of the project. The important thing is to work from an outline.

1. *Introduction.* Introduce the judges to what is to follow and thereby set the stage, so to speak, for the project description. The introduction should be brief and should also describe the general purpose of the project.

2. *Background information.* Give the reviewers an understanding of the following points: purpose and philosophy of the curriculum for which the project was developed, location and physical facilities of the school in which the entrant teaches, background and capability of the students, brief history of the project and any other information that may help the judges determine the teachability of the project.

3. *Overall goals and specific objectives.* Whereas the overall goals of the project can be given in a generalized narrative form, the instructional objectives should be very specific and are usually presented as a list. The overall goals may be thought of as long-ranging results that depend on the achievement of the specific objectives.

4. *Program description.* Reviewers will want to learn from this section what is to be done, how it is to be done, and who will do it. The procedures should be explained fully and in great detail. It can be a serious mistake to assume that the judges will comprehend the details of what, to the applicant, is a well-understood economic concept or instructional technique. The teacher should assume the judges know nothing whatever about what is being presented in the project. The sequential steps of the procedure should be logically arrayed and lengthy digressions avoided—no matter how interesting such digressions may be to the writer. Conciseness leads to clarity.

5. *Program evaluation.* The reviewers will be helped by objective evidence of what was accomplished in the project. Some systematic objective evidence of the extent to which the instructional aims were achieved must therefore be provided, and it must be described in the narrative. For this reason, the application should include a section on how student achievement was evaluated.

The editor hopes that this summary of what constitutes a good project entry will be useful to educators. He deeply appreciates the work of those teachers (nonwinners as well as winners) who are contributing to greater understanding of economics in our society. He also hopes that increasing numbers of teachers will enter the Awards Program in the future, thereby sharing their knowledge and experience with others as well as possibly receiving a financial reward.

The editor acknowledges with sincere thanks the cooperation of the teachers whose ideas appear in this volume. They have been most gracious in permitting us to use their material as well as being patient and understanding in agreeing to our editorial revisions.

Andrew T. Nappi
Illinois State University

An Economic Stew with Chickens and Rice

A Third-Grade Economics Unit

Penny M. Fox

Asbell Elementary School, Fayetteville, Arkansas

Overview

This project was a year-long study of the basic economic concepts through two very important agricultural products of Arkansas. It was planned to develop a strong foundation of economic understanding during the first semester by using economic language in a general sense, then to focus on chickens and rice for the second semester by showing the effect these two products have on the students' daily lives.

Third-grade pupils at Asbell Elementary School were given much freedom, with guidance, to make choices through the democratic processes as to the content and method of learning. Discovery was an important aspect of the learning style. Economics was the common denominator in the teaching of all the disciplines.

Introduction

The gentle rolling hills of northwest Arkansas make the area ideally suited for the raising and processing of chickens. Similarly, the fertile soil of the Grand Prairie in eastern Arkansas makes that area ideally suited for the growing and processing of rice. Arkansas leads the nation in the production of these two agricultural products. This project by my third-grade class focused on the importance of chickens and rice to the local area, the state, and the nation.

My children were well aware of the poultry industry in the area because of the abundance of chicken houses, old and new—big and little, spread throughout the countryside. Also, many of their parents work directly or indirectly in the industry. Tyson Foods, Inc., a leading poultry processor, has its headquarters less than five miles away in the neighboring city of Springdale, Arkansas. It employs more than 8,300 persons, including all related jobs. The

children, however, had little understanding of the complex relationship between the actual cost of producing chickens in the chicken houses and the price the consumer pays for them in the store—after production, processing, and distribution costs are added. They did, however, see the relationship between the work (labor) they did building a cardboard incubator for baby chicks and the finished product, a home for the chicks.

Parents, grandparents, and friends involved in the poultry industry from labor to management were readily available to share their knowledge and experience. In fact, the children became so enthusiastic in wanting their parents to participate that it became a chore to get them scheduled. Furthermore, the Future Farmers of America (FFA) members from Fayetteville High School served as mentors to my students. They made four different presentations on agricultural products of the state, using graphs, charts, maps, and activities relevant to third-graders. This proved to be mutually beneficial.

I had lived in the Philippine Islands where I collected many artifacts and photographs of the production of rice by human labor in that underdeveloped country. I was enthusiastic about sharing the information and providing extra incentive for this project by extending it to a short introduction of international trade. A Filipino student from the University of Arkansas was available as an additional resource person to compare labor in the Philippines to the technology of the United States farmer.

Furthermore, personnel from The School of Agriculture of the University of Arkansas, which is located less than a mile from our school, were eager to assist and participate in our activities. Likewise, Dr. Tom McKinnon, professor of economic education and director of the Bessie Moore Center for Economic Education, offered his services. Dr. Philip Besonen, who directs the economic workshops during the summer in addition to his teaching duties at the School of Education, University of Arkansas, also encouraged me to pursue the project.

I wanted to use the wealth of information and resources at my disposal to show my children how technology and capital equipment have affected agricultural production. I sought to present concepts to show relationships between these industries which place Arkansas number one in the nation and to show how they influence the local economy today. I wanted my students to gain a better appreciation of the role our state and country play in world trade.

Objectives

My long-range objective for 1981-82 was to teach my students how to learn and to present the skills necessary for independent learning. I hoped to instill a love of learning and a positive attitude toward work and citizenship. My idea was to approach my objective through the teaching of basic economic concepts and the principles of democracy. I planned to establish a strong background of economic principles during the first semester and guide the student toward a study of two important agricultural products of our state in the

second semester. I developed learning activities designed to have the students achieve the following objectives:

- To demonstrate an understanding of the difference between goods and services;
- To identify labor as a human resource;
- To categorize goods as capital, durable, or nondurable goods;
- To demonstrate an understanding of the notion that people attempt to extend resources through specialization and technology by dividing the labor;
- To differentiate between producers and consumers and to understand that most people are consumers; to understand that productivity depends on a good work attitude and human skills;
- To demonstrate an understanding that scarcity exists because resources are limited;
- To demonstrate the ability to solve problems by applying the five steps of economic analysis;
- To demonstrate the understanding that living in a free-enterprise system and a democracy insures, among other things, the right to a voice in the market and freedom to run for elected office;
- To demonstrate an understanding of the comparative advantage that Arkansas has over other states and countries because of its favorable topography and geography;
- To learn that communication with people increases knowledge, improves understanding, and develops mutual respect;
- To understand that the system of specialization requires the combined services of many people, which leads to interdependence and creates a need for world trade.

Learning Activities

When I met my students on the first day of school, I thought, "What a beautiful economic stew we could brew." There were twenty-five bouncing third-graders. The ingredients were present and the mixture of eight- and nine-year-olds just right for a perfect stew. Student personalities and interests provided the special spices needed. The final ingredient for perfect seasoning was the wide variety of socioeconomic backgrounds represented in the class. Over half of the parents of my children were either directly or indirectly engaged in agriculture-related jobs. Current economic conditions created an immediate need for teaching concepts of scarcity and wise decision making. I would have to teach vocabulary in a learning-by-doing process, using our familiar environment and goods used daily to keep learning relevant. When the background was built, I could then begin to teach concepts in job orientation. When we were ready, we would launch an in-depth study of Arkansas agriculture products.

A few of the learning activities and the economic concepts developed in the unit are described below:

1. Goods and services. On the first day of school some children failed to bring pencils (tools) needed for doing (producing) their school work. I capitalized on this situation by defining a pencil as a capital good, necessary for producing work. The word "goods" was written on a card cut in the shape of a fish, with a magnetic tape on the back. It was placed in a box marked "GOODS." I asked a student to sharpen some new pencils, saying, "You are providing a service when you sharpen pencils." The word "service" was written on a fish-shaped card and dropped into a box marked "SERVICES." The children were asked to name other goods and services and these words were also dropped into the appropriate boxes. Following a session of questions and answers, the children were asked to write other words and place them in the correct boxes. Those who failed were helped and given the chance to place their cards where they should go.

2. Specialization, technology, and division of labor. Just before the Labor Day weekend, I read the book *Labor Day* by James Marnell. The children were shocked to hear about child labor of long ago. We talked about the jobs that children do today, and I explained a custom in my class whereby the children assume responsibility for the care and upkeep of the classroom. They wanted to know all about this idea and were very interested in applying for jobs. I asked them to think about it over the weekend and talk with their parents about the work they do. The students returned to school the Tuesday after Labor Day, excited and ready to talk about their parents' jobs. They were more interested in the jobs they wanted in the class.

Their excitement, however, was somewhat dampened when they discovered that a prerequisite to job acceptance involved reading books on the career/jobs desired. We talked about job descriptions and how additional knowledge would enable them to become more efficient and better providers of services and thus able to meet consumer (student) demands for goods and services. We listed jobs available, ranging from teacher's assistant to audiovisual technician. Excitement became contagious as the children raced to check out books.

3. Scarcity and limited resources. I read the book *Why We Must Choose* by John Maher. We talked about the necessity of making wise choices because of limited resources. Heidi Olney recalled a previous lesson about all the products that are produced from trees. She asked how we could cut them down for furniture, houses, and pencils, but still have trees. I explained that for every tree cut, three more were planted.

It was mentioned that the pine trees we could see from our classroom window were our state tree. We decided to have a closer look. Several students picked up pine cones from under the trees. As we were returning to the class, it occurred to Sherri Jordan that pine cones would make good witches. Since it was very near Halloween, we decided to produce them. We needed pine needles for brooms and twigs for broom handles. It didn't occur to anyone

that we had nothing with which to make the heads. The next day, Heidi Olney prepared our mini-factory. She divided the labor: one group cut pine needles and taped them to the twigs, while another group cut witches' hats from felt. They complained about the hardships one suffers in such dull factory work. We prepared our assembly line only to learn there were no heads; scarcity had reared its ugly head. I agreed to bring acorns for our assembly line the next day, but in the meantime production came to a standstill.

4. Capital goods, products, and services. Mr. Nelson, salesperson for Tyson Foods, Inc., and father of one of our students, visited our classroom. Prior to Mr. Nelson's arrival, we listed workers on a small poultry farm and the capital goods needed by the farmer. We talked about the products and/or services each worker provided. It was obvious my students did not comprehend the magnitude of a large enterprise's production.

When Mr. Nelson arrived, his daughter Debora was so excited she could hardly introduce him to the class. He had Debora give each child an outline of his talk. The students were especially interested in how broilers were produced and asked many questions about chicks staying in incubators eighteen days. They cringed when he described how the workers severed the beaks of the baby chicks but laughed when he said, "Chicks have to get shots like you do, so they won't get sick." The children responded to questions about retail trade, to the amazement of Mr. Nelson. The interaction could have lasted all day, but Mr. Nelson concluded the discussion by explaining that each country which imports chickens prefers different parts of the chicken. Japan, for example, likes legs, while Hong Kong requests wings and even feet. This brought rounds of laughter from the class. Mr. Nelson invited the children to Tyson's plant in Springdale for a field trip.

Culminating Activity

The stew was beginning to boil, and the aroma filled the air as the students became involved preparing a play which would include the economic concepts they had learned during the year. Time was short, so it was imperative for the students to organize and divide the labor according to talent and desire on the part of the individual student.

For the most part the children themselves originated the ideas and carried them through with very little adult help. Our class had become a cohesive group. The students applied the steps of rational decision making to improve our production, frequently changing roles in the play to insure the best possible results.

The big day arrived. Two performances were given to standing-room-only audiences. An article was prepared and sent to the local newspaper. The school librarian videotaped one performance which was shown on the local TV channel. It appeared that everyone thoroughly enjoyed the play. It was a fitting climax to our study of economics through two Arkansas agricultural products, chickens and rice. The stew was cooled and all the children received their portions to savor and enjoy.

Evaluation

Although several forms of evaluation were used, changes in student performance and attitude determined through informal observations by parents and teacher were the criteria considered most important. Children who demonstrated low-level performance at the beginning of the year and those who seemed to have blocks to cognitive learning became leaders, exhibiting self-worth as they gave reports, demonstrations, campaign speeches, and so on. They discovered skills in art and map making as they interpreted information learned on field trips and from resource people.

Verbal interaction observed between small children and a university professor of economics, as they described our class and project to prospective teachers, was proof positive that my students did have an accurate command of economic concepts. The children demonstrated transfer of concepts of interdependence, opportunity cost, and comparative advantage at high levels of comprehension.

Conclusion

Reaction from parents, hungry for quality education, was positive. It drew the school and community closer together. Parents who interviewed their children to learn more about our involvement expressed appreciation for this action-oriented project. They felt it had increased their children's appetites for relevant learning and left them with a hunger for more economic education. Some parents marveled at the number and complexity of concepts they themselves had learned.

Hopping into Economics: First-Graders Learn about Economics through an Easter Theme

A First-Grade Economics Unit

Gaylene Davis

North Elementary School, Jonesboro, Arkansas

Rationale

The economy has already become a reality to first-grade children in their six short years. They have experienced wants and have expressed these desires in a variety of ways. In many instances certain wants have not been, nor could have been, granted. Making choices is the necessary response to this economic phenomenon. Therefore, appropriate experiences designed to introduce young children to economic concepts will expand their understanding and acceptance of their economic world. With this knowledge our children will be better equipped to begin making wise decisions. This firm foundation is necessary for the extension, expansion, and appreciation of more complex economic concepts.

Introduction

I taught economics during the entire school year, but this project only deals with March, April, and May. Economics was taught daily for thirty to forty minutes following an economic project that I designed for my first-grade children. Our bulletin boards, flip charts, murals, pictures, posters, advertisements, products, poems, stories, songs, role playing, finger plays, books, and filmstrips helped reinforce what we were learning. Our resource people further helped us understand economic concepts. Our field trips took us into the working world. This type of economic project would be a great aid to children regardless of background. Everyone will have to face and deal with these issues, so my program could be easily adapted to any primary classroom.

My overall goal for this unit was to make this economic study exciting and interesting for my students. I wanted to review basic economic concepts taught in previous economics lessons. Finally, I encouraged students to apply these

understandings in their daily lives. More specifically, I wanted students to be able to:

- Distinguish between wants and needs;
- Understand the meaning of the term scarcity;
- See the importance of making wise decisions by experiencing the five steps of problem solving;
- Understand the meaning of opportunity cost;
- Have some understanding of why they cannot have everything they want;
- Become producers of a product;
- Experience consumer buying in the marketplace.

Learning Activities

For initial motivation the students were asked what they wanted or needed for Easter. I showed them pictures of familiar goods and a distinction was made between wants (puzzle, gun, doll) and needs (shoes, coat, food). I asked them to think about the one thing that they wanted the most. Then I gave them the definition of a want—something desired, but not needed. We then sang an original song entitled “What Do You Want for Easter?” In the song the students were asked what they wanted for Easter. They sang back what they had for a want. For example, Shellie sang, “I want a new doll.” The class then sang back, “Shellie wants a new doll.” The words “want” and “need” were interchanged during this song. The definition of a need was given as something which is necessary to life, such as shelter, food, clothing, and transportation.

A few days later, after the children fully understood the meaning and words of the song, we created a new song entitled “Our Needs.” It was sung to the tune of “Mary had a little lamb.” The lyrics are as follows:

Mary had a need, a need, a need
Mary had a need
and she had a choice to make.

Mary had a want, a want, a want
Mary had a want
and she had a choice to make.

Mary had a problem, a problem, a problem
Mary had a problem
and she had a choice to make.

Throughout the rest of study we made use of several attractive bulletin boards. These led to classroom discussions. A favorite board was that of Mr. Bunny, with all his tools about him, painting his goods, eggs. We discussed his tools: the paint brush, the palette, the basket, and his drop cloth, which were durable tools and would last a long time. We compared them to the non-durable tools or goods that would be consumed rapidly, such as the eggs, the dye, and the chocolate. The title of this bulletin board was, “He Is A

Producer." We discussed the idea that his work was decorating and delivering eggs to the children of the world.

One art activity the children especially enjoyed was making Easter wish books entitled "Wants Or Needs—Which Shall It Be?" The book contained drawings of things needed at home (food, clothing, shelter), at school (desk, pencils, paper), and in the community (streets, fire trucks, stop signs). The children also drew pictures of things that they wanted at home (color television, ice maker, stereo), at school (games, puzzles, treats), and in the community (park, zoo, circus). The booklets and drawings were shared with the entire class. The children showed their booklets and explained the economic choices that they had made. It was emphasized through these booklets that choices had to be made and that inflation and high cost prevented us from having everything that we wanted. Opportunity cost was defined as the next best good or service which is foregone when a particular good or service is purchased or produced. The students told their opportunity costs. It was decided that the item given up was the opportunity cost of the choice.

Our activities during the period also included several games. For instance, a "wants" and "needs" game was made available for the students during learning center time. It consisted of two containers. One container was labeled "wants" and the other "needs." Pictures depicting wants and needs were placed in the proper container. The pictures were coded on the back for self-checking. The "want" pictures had baskets on them; the "need" pictures had bunnies on them.

Several outside resource persons visited us over the three-month period. One such person was Ms. Rabbit, who visited the classroom and encouraged the children to think carefully before putting an item on their Easter lists. She didn't paint a bleak picture to spoil the fun, but she did encourage the students to remember that wants and needs are very expensive, and we must be selective. This was Linda Willkey, the manager of Skaggs department store, who explained to them that the size of chocolate bunnies, Easter candy, and baskets had gotten smaller because of inflation. She also explained that, because of all their wants, they possibly might not get a new Easter outfit. This made our studies very real to the students.

Some of the more meaningful activities directly involved the students. For a more personal experience dealing with scarcity, the students earned pennies stamped on their work folders for completing work on time and producing quality work. Each Friday was designated "Pay Day." Those students who had earned ten pennies were allowed to purchase goods of their choice. Those goods included both durables (pencils, erasers, rulers) and nondurables (suckers, candy canes, balloons). A value of five or ten cents was placed on each item. The students had to choose whether to purchase one ten-cent item or two five-cent items. Some children did not have enough stamped pennies (limited resources) to cash in. This created a real scarcity situation that was easily understood by the children. This method was used for about three months, which led to the creation of a bank for our room.

The establishment of our bank led us to the study and comparison of a

real bank. We learned through bank officials, books, coloring books, and slides that a real bank has vaults and safe deposit boxes. We learned that the role of capital is very important and that banks promote economic growth. Through discussions we learned about loans, checking accounts, savings accounts, and the flow of money. The banker, in a telephone interview, explained how banks assist industries to get started or expand. He told about the different people who share the work (division of labor) in the bank. For instance, the teller's job was to take deposits, to cash the checks, and to keep the money in a drawer. Each job in the bank was explained as it appeared in the coloring book given to us by Citizens Bank. We discussed the different economic concepts in the books as we colored them. The children took their books home to share their economic learning with their parents. A bank official also visited our classroom.

Records and films were used during our study. For example, we viewed the film about the baker, entitled "The Big Bakery." We followed with the film "Bread." We compared the bread baking in the film to the baking in the local bakery and then to the baking of our own bread. Before we used the real goods or capital to produce our bread, we first modeled and made small loaves of bread from clay, sand, and other pretend ingredients so that when we switched over to real capital, we knew how and better understood our job that had previously been explained, assigned, and practiced. We also understood that to make bread we needed a kneader, a molder, an oven operator, a slicer, and a wrapper, bowls, cups, racks, decorators, ingredients or goods, and labor. As a class we discussed whether the materials and labor alone would be enough to produce bread, and how tools, a workplace, and the businessowner are also needed if the baker is to make a profit and perform a service. They understood this as being interdependent.

Many books about rabbits were read and discussed. Through these books we did a lot of problem solving, using the five-step economic approach to reach our decisions. Through these books interdependence was again mentioned and made real to the children through stories and discussions. For example, *The Jack Rabbit* showed the interdependence between rabbits and plants. Many Indians and wild animals were dependent upon the rabbit for food. Trappers wanted their furs to sell or trade for profit.

One of our culminating activities was the production of "Bunny, Egg, and Cheese Dandy." The meals were produced entirely by the children and were sold at \$1.00 per plate. The menu was Bunny, Egg, and Cheese Dandy, Spring Blossom Punch, and assorted fruit slices. In this learning activity the children were busy as producers and consumers, buyers and sellers. They took turns at a variety of jobs, including those of waiter, waitress, seller, buyer, and baker. They found that with good service they received tips. This activity helped the children better understand the concepts of cost, division of labor, assembly lines, supply, demand, and profit. We concluded the unit by producing a mural. The children also wrote their parents thank-you notes. These reflected

economic concepts that each child had begun to recognize and understand. Writing assignments all week had been on Bunny, Egg, and Cheese Dandy, and math problems had dealt with the cost of groceries.

Evaluation and Conclusions

Although evaluation had occurred all year during our economic project, the post-test strongly revealed a gain in test scores. It was interesting to compare reactions of the children to the questions in the pre-testing as opposed to the post-testing. During the pre-test children were obviously perplexed and confused. Some giggled because they were nervous during the pre-test and couldn't settle down. During the post-test, they were confident and serious about their newly found knowledge in economics.

At the learning centers I observed the children achieving success through various economic activities, games, and exercises. Their vocabularies increased, reading improved, and skills strengthened as their understanding of basic economic concepts expanded. The children's vocabularies included many different economic terms they would use in conversation. My students shared their economic knowledge with their families and others at school. I was very proud of the information they took home and shared with their parents and friends. Several parents and teachers made favorable remarks about how much the children had gained in the area of economic study. Many parents were impressed with the children's economic proficiency as they answered questions and told about economic activities. Parents, in fact, told me how money-conscious their children had become. Before buying something or making a decision, a child would weigh the alternatives and then make a decision. One mother said that her son had learned how to manage his allowance between wants and needs.

Finally, this year-long economic project definitely improved by children's work habits and behavior. However, the real values of this project were the visible changes in my students. I was able to observe confidence growing in these children. They were grasping basic economic concepts that related to our city's and families' problems. But, more important, they had learned to approach these problems in a democratic and orderly way.

Second-Graders Take Steps to Learn about Money

An Economics Unit for the Second Grade

Jan Butler

Crestwood Elementary School, Crestwood, Kentucky

Introduction and Goals

This past semester I attended an economic education seminar. My instructor was so enthusiastic, knowledgeable, and insightful about the world of economics that it was contagious! As my understanding and awareness of economics grew, I felt the need, the desire, and the challenge for my own students to become aware and informed about the world of economics. Because of the age of second-graders and a limited amount of class time, I began to question what economic concepts I could teach that would interest young ones and keep their attention. Being in the field of education, I began to question myself with regard to a statement I had used successfully in the past, "Begin teaching where the children are and with what is familiar to them." With this thought in mind, I realized that money is a common and familiar word in all children's lives.

Children may receive an allowance or gifts of money, and they are aware various items cost different amounts of money. I decided to use this background information in building an understanding of money—why we use it; why we need it; how we get it; and the value of it. By limiting my teaching topic to the economic concept of money, the children would find this appealing. Not only is money important to all children but it is real! At the same time I realized I would have not only the opportunity to teach more than just facts about money, but also to teach students to express themselves, take risks, share experiences with peers, interact with others, and recognize the need for making responsible decisions.

The instructional activities presented in this unit were based upon everyday experiences that a child can find meaningful and can relate to. As the child gains knowledge of basic economic concepts, a foundation is being laid for now and for the future. This foundation will allow the child to make sound economic decisions when moving in the real world where money is the medium of exchange. As my children began to think about money, they also developed

an understanding of the economic concepts related to making wise economic decisions. My unit included these topics: barter, money today, medium of exchange, three basic needs, unlimited wants, opportunity costs, goods and services, income, occupations, and savings.

Learning Activities

To initiate interest in the topic of money, I put up a bulletin board entitled, "Taking Steps to Learn about Money." I began the discussion with the following questions: "How many of you like money? How do you spend your money? Do you ever save your money? How do your parents spend their money?" Then, as these questions were answered and enthusiasm grew, I led the discussion with questions about the beginnings of money, the need for money, and the ways to get money. After this, I explained that there are steps for learning about money and using it. I informed the students that, after these steps were taken, they would spend and save money in a wiser way. Then, the children participated by tracing their footprints and cutting them out of construction paper; they marked their names on their footprints and with pride placed them on the bulletin board.

During the course of the study, I used many instructional activities. These included stories, books, films, drawings, coloring activities, bulletin board displays, collages, worksheets, discussions, graphs, fun sheets, picture cards, posters, cutting and pasting, short-answer tests, resource people, and murals. Practicing reading, writing, visual and auditory skills enabled the children to balance experiences and more readily process information. The activities were designed to be meaningful to second-graders in their daily living. A few of the learning activities are described below.

Medium of exchange. This activity taught students that there are problems with barter. When people barter it may be difficult to make the right trade; it is time-consuming, and the trade may be of unequal value. The hands-on approach led the children to the discovery that money is easier, faster, and fairer than barter. I collected pictures of various items of greatly varying values (car, pencil, book, doll, watch). Then I pasted the picture to a card and on the back of the card wrote the approximate value of the item in small letters. Each picture card was shown to the class so they could see all the available items to be traded. Next, I passed out one card to each pupil. The students were asked to pretend that the pictures were real items they could trade. I gave them five minutes to trade. After time was called, we found that one student had a stuffed animal and wanted to trade for a watch. However, the person who had the watch didn't want to trade. Others in the class had made trades with unequal values. This led to a discussion of the problems with trade and the need for a more efficient way of exchanging—money.

Currency and checks. After several activities dealing with the need to recognize and discriminate money values and with the need to be able to count money, I wanted the students to see that checks are an important form of

money today. Furthermore, the children needed to know that checks were used for safety, convenience, and record keeping. Kenneth Leet, a local bank officer, visited with our class and shared with the students information about money and banking. He spoke with the children about how a check is a form of money and why so many people use checks today. He showed the children his bank's checks and the names printed on them. Keeping enough money in the bank so a check would always be worth the amount written on it was stressed. Mr. Leet explained that only the person whose name is printed on the check may write a check. Naturally, the children asked about bank robberies, and he very easily explained how banks take precautions. The children were happy to write Mr. Leet a thank-you letter and accept his invitation to tour his bank and see the vault and safe.

Goods and services. I needed to build a background for the economic understanding that money is paid for services and goods. However, the students first had to understand goods and services. One activity leading to this was viewing a filmstrip, *The Doghouse*. This film shows how two boys decide to build a doghouse for their puppy. The boys realize that the services of their father and the services of a salesman are needed. The boys gather all the goods necessary for the production of the house and start to work. After the film, we discussed the reason for the dog house (shelter), the goods needed (wood, tools, nails), and the services (of father and salesman). Finally, we looked at a list of people who produce either goods or services and distinguished between the two.

Culminating Activity

The culminating activity for this unit of study gave the children the opportunity of earning and spending classroom money. In this way the students put into practice the economic concepts they had learned. They were given an initial amount of *capital* (money) for completing a work application. Money was earned each day for a particular written work assignment which was posted on the morning work board. The amount to be paid was also included. Additional income was earned by completing certain money task cards at our economic learning center. Students went to the money center after they completed their daily work assignments. Special times during the week were given so everyone had an opportunity to go to the center and choose a money card. Since space was limited, work was completed at the student's own desk. Some money cards indicated the work could be done at home. These cards allowed the slower student to earn extra money too. They were excellent for the enthusiastic worker and also for teaching responsibility. I paid the students daily for completed work but was not responsible for lost, stolen, or forgotten money. Furthermore, torn, defaced, or marked money was not accepted on market days. On Market days (Fridays), students could spend their money. Market items were books, small toys, jewelry, crayons, pencils, posters, and puzzles. I bought many of these items inexpensively at garage sales.

Evaluation

Upon completion of the unit, I administered a post-test and found significant rises in scores on the same test given before the unit was taught. I really felt my second-grade students had been introduced to our economic system. I saw them gain an understanding of the medium of exchange from barter to money. Counting money became a real challenge to them and one they mastered as they had fun working and learning. My students were more knowledgeable as to how and why their parents used checks for their needs and wants and why all their wants could not be met since incomes are limited and varied. Realizing that more income is earned when both parents work helped the students to have a better understanding of why both parents do work. As the children made choices and decisions with their minds and monies, I saw learning taking place, sometimes wisely and sometimes unwisely, but the foundation for making wise economic decisions was beginning and a new awareness about it was beginning also. Saving money was a familiar topic to most students as they proudly shared their saved amounts. Having money for bank saving seemed to become a new challenge to some students.

Common Property Resources

A Third-Grade Unit in Economics

Patricia A. Jansen

Lake Elementary School, Millbury, Ohio

Introduction

This unit was used with my self-contained third-graders in our rural school. They had already acquired basic economic principles and terminology which were beneficial in understanding the new concepts taught. With the recent interest and awareness of pollution, conservation, and ecology, I wanted to prepare a unit on common property resources to make my students aware of their basic characteristics and how they differ from privately owned property. Having the students take responsibility for these resources was my main goal.

Learning Activities

To begin the unit, we read Dr. Seuss' book *The Lorax* to gain an overview of common property resources and their misuse. We looked at how this could affect the students both now and in the future. The students completed a worksheet on how they felt about things found in our environment—a dump, forests, the beach, dams, soda pop cans, parking lots, and so on. As we tallied the results, we found differences. This led us to a discussion about differences in ecological decisions and the problems that are thus created.

Activities and discussions followed, dealing with environmental problems that are caused because many important resources are not owned by anyone and consequently lack the protection and guidance that a private owner normally provides. To reinforce this, I asked the janitor not to clean our room and found that the students noticed the mess in their school surroundings. We related this to how people do this to our environment and how no one cleans it, for no one owns it.

Next, we viewed the Walt Disney film *People on Market Street* and discussed the difference between common property rights and private property rights. We collected articles from newspapers and magazines concerning common property resources. In no time at all, we had filled a large bulletin board with articles about pollution in rivers, acid rain, and curbs on commercial perch fishing, to name a few. Common property resources were divided into four main areas: land, air, water, and wild animals.

Looking at what happens when nature is interfered with followed. Worksheets were completed; in one, students were asked to color pictures of children helping their environment and to put an X on those harming the environment. We made a "Pandora's Box" bulletin board. The children added pictures of demons (water pollution, air pollution, land pollution, refuse, erosion) as the unit progressed.

Our work continued as we looked carefully at each of our common property resources. We began with land. I stressed the economic relationship between non-ownership and overuse of land, the misuses and pollution of land, and the resulting costs. We viewed a National Geographic Society filmstrip, *The Land*, which identified major causes of land pollution. After seeing the film, the children were asked to draw and label types of pollution. They drew pictures of forest fires, litter, dumps, hazardous waste, erosion, and strip mining. Magazines and newspapers provided reinforcement with current articles about our land rush, problems with our national parks, and struggles against development. Finally, we looked at how trees are used and abused. We studied magazine ads from the Boise Cascade Corporation to learn what is being done to preserve our supply of wood. General Telephone & Electronics (GTE) provided us with a look at the future with an article about growing trees underground.

A more specific study of water as a common property followed. We viewed the National Geographic Society filmstrip, *Air and Water*. A chart with the

types of water that could be common property resources (streams, rivers, lakes, oceans, underground water) was placed on the wall. We used various worksheets depicting different causes of water pollution—mineral and phosphate poisoning, sewage, garbage, factory waste, rain water from dirty streets, mud from soil erosion, detergents, and DDT. Ways that people could help were explored. "The Lake That Nature Built," a long poem by V. Taylor from the *Ranger Rick* magazine, was read. This told about the food chain with different types of plants and animals and made us aware of our responsibilities. I utilized a special report by *Newsweek*, entitled "Are We Running Out of Water," as well as current articles in other periodicals. Finally we learned how water can be made clean by visiting our local water plant.

Next, air as a common property resource was studied. We examined why air is necessary, how it is polluted and misused, the costs associated with air use because it is a common property resource, and the economic relationship between ownership and nonownership of our air supply. The students found a worksheet on air pollution caused by the automobile enlightening. They were surprised to learn that the average family car contributes six pounds of pollutants to the air each day. We performed several experiments listed in *Environmental Experiences*, a publication by the Thomas Alva Edison Foundation. For example, to get a general impression of how much dirt there is in the air, we punched a small hole in the bottom of an empty coffee can and then nailed the can to a pole. The combined height of the can and the pole kept out dust from the ground. A disc spread with a thick coating of petroleum jelly was placed at the bottom of the coffee can. Our test was started by placing the stand out in an open area. In a couple of weeks, we saw how dirty the air around us was.

The last common property resource studied, wild animals, provided great interest. We not only looked at problems affecting wild animals but also at the interrelationship among wild animals, land, air, and water. Objectives included helping the students to realize the costs involved when wild animals become endangered or extinct, to understand the economic relationship between animals and the balance of nature, and to become aware of the pros and cons concerning wildlife protection. Again I employed a filmstrip, worksheets, articles, and bulletin boards. In addition, we took a field trip to Magees Marsh to visit a wildlife preserve in our area. A speaker from the Toledo Zoo came to our class, brought animals, and talked to the students about wildlife in our area. I posted a list of Ohio's endangered wild animals and had the students report on them. We made a paper model of the polar bear as a symbol to represent endangered species. We also read articles about how some animals have been saved.

Our next topic of study gave us an awareness of our needs. Objectives were to have students identify what they need to adequately survive, differentiate between needs and wants, realize the economic problems caused by misusing and polluting our common property resources, and gain an understanding of how to cope with this misuse. One specific activity concerned

the students' use of water. Each student was asked to find out how he could save water when brushing his teeth, when sprinkling the lawn, when washing dishes, and when drinking water. Now that we were near the completion of the unit, we went back and reread *The Lorax* with greater understanding and insights. We made and wore a badge of the lorax as a reminder to protect and preserve our common property resources.

Culminating Activities and Conclusions

Our final studies looked into conservation and the future. In concluding the unit, I had several objectives in mind: to acquaint students with ways to protect and to improve our common resources, to have students become aware of the costs involved when common property resources are misused or polluted, and to give students an understanding of their influence on the environment and their responsibility for making wise decisions.

We studied many advertisements in magazines which related how gains are being made to conserve our environment. For example, both Gulf Oil Company and Bethlehem Steel ads deal more with conservation measures than with the products they are selling. F.C. Smith's *The First Book of Conservation* gave us the story of the beginnings of pollution in our country by the first white settlers. This was contrasted with the Indians' care for the environment. Several of our concluding projects showed the students how they could help with conservation. For instance, they completed a worksheet on car pooling. With enthusiasm they made posters about conservation for our school and our shopping area.

Our final activities in the unit looked to the future. My main goal was to have the students become totally aware of what they need to do to become more involved in protecting and saving our common property resources. More specifically, we looked at effects of shortages and alternatives in resources, availability, and future needs of non-renewable resources, and problems that we cannot control or predict. One approach was to look at various solutions to problems (prohibition, directives, voluntary action, taxes, regulation, payment, simple and direct action). We concluded that at the present time we have no perfect solution. Each policy will have costs and benefits, and each situation should be individually weighed. A close study of the Mount St. Helens' eruption and the Medfly problem revealed the unpredictability of problems we encounter. To conclude our unit, we wrote letters to our congressmen, asking them to improve our common property resources. Lastly, the students brought in T-shirts and applied an iron-on slogan—"It's Your World." We wore them on the same day to make our schoolmates more aware of our problems and responsibilities.

At the end of the unit, the students did considerably better on a post-test than on the pre-test administered earlier. They conscientiously answered a worksheet ("Who Are You?") which asked them questions about their actions and responsibilities of their behavior, ranging from keeping the thermostat

lower to telling others about conserving energy. During the unit they became aware of their responsibilities to common property resources and related this not only to their school environment but also to the world outside their classroom.

GOOD IDEAS IN BRIEF: PRIMARY LEVEL

GAYLE SHAW CRAMER, PAMELA COOPER, JUDI BENSON, and JAN MANOCCHIO of the *Bellflower Elementary School, Mentor, Ohio*, worked together to blend economics and an original musical for their first- and second-grade students. After familiarizing students with basic economic terms and concepts through role playing, group activities, and discussions, they capitalized on the creative imagination of their six- and seven-year-olds. They entered the land of make believe and the fantasy kingdom of Yeh-but Land. The musical reinforced such concepts as supply and demand, division of labor, allocation of goods and services, producer, consumer, scarcity, and a shortage. It was about the king of a place called Yeh-but Land and a little boy named Tommy, who creates a lot of creatures called Yeh-buts. So many Yeh-buts are created that there is a scarcity of goods and services. The students learned catchy songs which helped them retain the principles of economics in a way that was fun. They presented the play for both the entire student body and parents and friends. After the play students also performed well on an essay test by incorporating economic terms and ideas into their answers.

ALICE L. BAYNE of the *Whitney Young Elementary School, Louisville, Kentucky*, combined an economics unit of study and her assignment to direct a musical program for an evening PTA meeting. Sixty students from grades two through five, three classroom teachers, a music instructor, and many parent volunteers contributed to the project. Since their creative efforts were needed in the selection and the production of the musical, they decided to use prepared materials in the economic development of America as a basis of study. *The Basic U.S. Economic Concepts* by Visual Materials, Inc., *Walt Disney's Wide World of Economics* and *Enterprise* multimedia kit, *The American Enterprise Film Series*, and selected filmstrips from *Trade-offs* were chosen. The teachers let the students brainstorm for songs, dances, and poems that reflected the American economic heritage. Some of the dancing and all art work and costume design were products of students. Games, art activities, program practice, and class instruction were a two-hour part of each day for five weeks. The students became excited about the project and really began to feel that the American system of economics was the big reason for people wanting to come to America. The feelings of patriotism and pride culminated on the night of the performance.

BARBARA SANTANA and **PHYLLIS WAGERS** of the *Bay Crest Elementary School, Tampa, Florida*, worked together on this unit for their second-graders who had little previous exposure to economics. This project focused on economics in a school setting, which was a common experience for all children involved. Generalizing activities were utilized on each economic concept to show children that economics is a total part of our lives, not just something that happens at school. Some of the school activities included observing specialization in the lunchroom and interviewing the librarian on the supply and demand of various library books. Children wrote job applications for a school job—listing their experience and the expected salary. The best applicants were selected to become a teacher, aide, coach, music and PE teacher, librarian, custodian, lunchroom worker, health room worker, secretary, and principal. Children looked at consumption of goods at school and learned about the school budget. Some of the activities included field trips to a bank and two fast-food restaurants. Students compared the goods, services, and advertising of the restaurants. Economic concepts and definitions were also taught through the use of dittos, transparencies, filmstrips, writing lessons, homework, art and math activities, a learning center, and stories.

MARILYN LOKEY of the *Cavanaugh Elementary School, Fort Smith, Arkansas*, used her school's PTA Fall Festival as a springboard for teaching economics in the second grade. The students were excited about this festival, the PTA's only big fund-raising event. Very early in the year they began asking questions about the event. When would it be held? What would the PTA use the money for? Why was it necessary to raise money? Basic economic concepts such as resources, wants and needs, goods and services, specialization, consumer, and money as a medium of exchange were taught in relation to preparations for and activities of the school's festival. Class discussions, filmstrips, games, artwork, and role playing were some of the techniques employed in the unit. As a culminating activity for expressing some of the economic ideas learned, the class produced some short skits and presented them in a school assembly. During the evaluation period, the teacher saw post-test scores considerably higher than pre-test scores. However, she was even more gratified to see children using economic knowledge in classroom discussion and in decision making.

HELEN HOLLAND of the *Orr Elementary School, Fort Smith, Arkansas*, involved her second-graders in economic decision making while sharing her experiences of a tour through Jordan, Israel, and Egypt. She allowed them to make the trip vicariously with her through slides, pictures, films, and charts. As they traveled, economic concepts and principles were emphasized. Each lesson on this economic tour was presented in three steps—teach, tour, task. First came a period of instruction in economics. Audiovisual materials, books, posters, charts, study sheets, and educational television were used to introduce and teach economic concepts. Next, slides, films, charts, posters, and

souvenirs of the countries visited were employed. Finally, the students were actively involved through role playing, reports, finger puppets, charts, murals, discussion groups, and learning centers. Culminating activities included operating Holland's Flower Company, going on a shopping trip, and producing a filmstrip. Through this unit the children were instilled with an appreciation of a loyalty to our freedoms (including private enterprise) as well as a love of our country.

BESSANNE MCKNIGHT of the *East Elementary School, Jonesboro, Arkansas*, formed an economic unit centered around a television station. "Pennywise," a series of twelve fifteen-minute programs in economic education, became a perfect way to introduce her first-graders to economics. Seeing that "Pennywise" was becoming a vital part of the class's weekly schedule and realizing the important part television played in her students' lives, the teacher based their learning on watching television. For example, viewing television commercials led to a discussion of wants and needs. A trip to a local television station provided information about income as the students studied the stations's workers and their titles. The last project of the unit involved all of their learning. They created an imaginary television station, set up a division of labor with specialized workers, and produced their own television show complete with commercials. The play was videotaped, and the children were thrilled to see themselves on television. Learning that economics is a part of our everyday living was fun and thus permanent.

VAUGHN GROSS of the *Northlake Elementary School*, CAROLYN THOMPSON of the *Northwood Hills Elementary School*, and CASSIE WHEELIS of the *Dartmouth Elementary School* worked together on a unit in economics for their school district in *Richardson, Arkansas*. "Our Book Company" was an economic education unit designed to help second-graders understand and experience basic economic principles through participation in a business simulation. The unit began with an introduction to the simplest concepts and proceeded to the more difficult. The culminating activities revolved around the simulation of a business, the book company. While focusing on economic principles, the nature of the lessons and simulation (i.e., producing a book) provided strong emphasis on many other areas of the curriculum. Creative writing, mathematics, reading, and art skills were well integrated throughout the unit. The unit encouraged active participation by all students at all levels. It provided students with insight into economic roles, the problems that arise in an economic system, and the decision-making processes that are a part of our free-enterprise system. Economic concepts were reinforced by combining learning with pleasant activities. Varying strategies were used throughout to meet the individual needs of all the students. "Our Book Company" provided an interesting, pleasant, and motivational way to teach and learn about economics in a practical setting. The four teachers piloting "Our Book Company" found it an interesting, and educational experience. Periodic

evaluative meetings were held by the teachers during the eighteen weeks of actual implementation. As a result of the successful pilot, plans for district-wide dissemination were made in the fall of 1982.

EUNICE MILLER, first-grade teacher, and CARMELETTA WITHERS, media specialist, of the *Howard Elementary School* in *Fort Smith, Arkansas*, created "Cents Off or Nonsense" as a year-long unit for first-graders. They decided to work together when they became concerned about the wasting of food in the cafeteria and the students' lack of understanding as to how our need for food is met on limited incomes. Most of their students participated in the free or reduced-cost breakfast and lunch programs. They felt that they increased the children's awareness of the need for good nutrition as they taught basic economic concepts. The children learned that food was a basic need. They found out about the value of learning to make intelligent choices so as to obtain the best use of limited incomes. Activities ranged from setting up a store in the classroom, visiting a McDonald's restaurant, and collecting coupons to presenting a play about shopping. As a culminating activity, they planned a trip to Milgram's grocery store to talk to the manager about coupons. While at the store, students purchased food with coupons they had collected. They donated their food to a community center for senior citizens and were interested to learn that meals were provided with tax money for the elderly just as breakfasts and lunches were provided for the children at school.

Economic Promises and Challenges of Productive Resources

A Fifth-Grade Unit in Economics

Mary Kathryn Bourbonnais

Bethel Elementary School, Shawnee, Oklahoma

Introduction and Organization

The theme "Economic Promises and Challenges of Productive Resources" was an integrated part of the year-long curriculum for the fifth-grade students at Bethel School. It was the general purpose of this unit to develop economically literate, personally concerned, appreciative citizens who could think and act rationally while assuming active roles as consumers, producers, and investors in America's free-enterprise society.

The theme was integrated into the children's social studies class for the specific purposes of helping the students:

1. State and understand the significance of productive resources (natural, human, and capital goods) to consumers, producers, and investors throughout the ages.
2. Develop an awareness of the vital importance of active and responsible consumers, producers, and investors to the progress and economic growth enjoyed by mankind throughout the ages.
3. Appreciate the productive resources, human economic contributions, and the progress which has raised the standard of living for people throughout the ages.

Throughout the year the students used a timeline from the prehistoric times of cave dwellers to the ultra-modern times of space explorers to note the changes and progress human beings have made over the ages as they accepted the economic promises and challenges of the productive resources of their times.

In order to promote an appreciation of our ancestors' economic contributions and an understanding of the effect they have made on today's standards of living, we identified and studied the productive resources and the economic promises and challenges of the following groups of people: Early People in North America (Cave Dwellers and Early Indians), Early Europeans, Explorers, Early Builders of Our Nation (Colonists and Pioneers), and Enterprising Americans Today (Free-Enterprise Society). These sequential units allowed the students the opportunity to become aware of and to appreciate the many economic discoveries, inventions, and improvements which one generation of consumers and producers inherited from another. From the spirit and energy of individual men and women, America has grown great! In order to insure future progress and economic well-being, it is evident that all physically and mentally able Americans must accept active and responsible roles as consumers, producers, and investors. Today's citizens of our free-enterprise society must appreciate, conserve, and make wise use of productive resources in order to satisfy the growing wants and needs of today's society and future generations to come.

For the purpose of this unit, the term "economic promise" was defined as known productive resources which were available for an individual's use in attempting to satisfy personal economic wants and needs. The term "economic challenge" was defined as something that commanded attention, interest, or effort from consumers, producers, and/or investors. The *Economic Education Curriculum Guide* prepared by the State Economic Education Committee and the Oklahoma Education Curriculum Improvement Committee served as our principal authoritative source of economic concepts and ideas appropriate for the elementary school curriculum.

Bethel students were introduced to economic ideas and concepts as they participated in weekly TASK workshops throughout the year. The letters of TASK represent *Thinkers Applying Skills and Knowledge*. The purpose of the workshop setting was to allow maximum individualized instruction and use of scientific methods of thinking and learning in the social studies classes.

Students learned by observing, recording, communicating, predicting, interpreting, classifying, experimenting, formulating generalizations and conclusions, and applying what they learned to their lives as consumers, producers, and investors of today's free-enterprise society. Each child was obligated in the TASK workshop to do research, discuss and record the findings, and complete a project to reflect this newly acquired knowledge. The projects and written reports were then displayed in the Children's Museum for all students of the school to see. Judges were chosen to give six ribbons and honorable mention to outstanding displays. The children enjoyed sharing their findings with their friends, parents, grandparents, teachers, professors, the news media, and citizens of Bethel Acres and surrounding communities.

Summary of Economic Units and Activities

The following paragraphs provide an overview of the activities and con-

cepts from each mini-unit which highlighted our study and promoted economic understandings:

Early people (cave dwellers and early Indians). The major goal was to have the students become aware of the economic promises and challenges of early humans and understand how their use of productive resources helped them satisfy their economic wants and needs. This unit stressed the basic economic needs of humankind and its use of productive resources to satisfy its needs. We role-played life on a deserted island to better understand the dependence of human beings on nature. The children made model homes, tools, charts, murals, and dioramas showing early people's economic activities. Over ninety projects were displayed in the Children's Museum. This initial unit served a dual educational purpose: it was designed to promote economic understanding as well as the art of learning, and it was a good investment of time in teaching the children *how* to learn. The children learned how to locate information, do research, and select the best method for learning which suited the situation they were in. We transformed our room into a prehistoric setting and built a cave to house our interest/resource center. The children were encouraged to use the task cards, supplemental books, filmstrips, and so on from the cave to enrich their understanding of social studies, economics, and science. These three disciplines complemented each other since our theme was primarily concerned with productive resources, i.e., natural, human, and capital resources. The disciplines of language and art were used as the children prepared booklets about early people.

Early Europeans. This unit's major goal was to have students become aware of the economic conditions of early Europeans and to understand how early Europeans used productive resources to satisfy their economic wants. Using murals and charts the children showed there was a time when early Europeans hunted and fished for a living as the Indians did. However, the Europeans learned to use their land better and to produce more food with less work. The challenge to make better use of their land led them to take advantage of four of the world's great discoveries, which helped make life easier and better and created a new economic promise for generations to come. The plow, the wheel, the breeding of domesticated animals, and the manufacture and use of iron and steel made life in Europe different in many ways from life in prehistoric North America. The children's creative story, "Life without the Wheel" (or other discovery), reflected an appreciation and awareness of inventions in raising standards of living.

Explorers. The objective of this unit was to help the students become aware of the economic challenges of explorers and understand how they used productive resources to satisfy their wants. The children prepared booklets and murals to reflect their research findings about explorers, their economic challenges, wants, and needs. Short plays and skits were given as the children shared their facts with the class. The children stressed the fact that consumer and producer demands prompted the explorations. As a result world trade began.

The official adoption of the S.S. *Arco Anchorage* was among the most memorable events of the year. Adoption papers signed with the Propeller Club of the United States allowed my students the opportunity to correspond during this 1981-82 school year with Captain Julius C. Moon and the crew of the *Arco Anchorage*. This correspondence made possible a comparative study of productive resources used by the merchant marine of the 1800s and those of today. The *Arco Anchorage*, an oil tanker, is 883 feet in overall length (approximately the length of three football fields), and it has a cargo capacity of 847,644 barrels. Economic concepts and map study were made extremely meaningful and interesting as we followed the ship's itinerary from Valdez, Alaska, to the Panama Canal. The captain's letters shared real-life economic experiences with the children. His discussion of supply and demand and the all-important challenge to producers to use productive resources in order to meet the world's growing wants was both timely and meaningful to our young students of economic education.

Early builders of our nation (colonists and pioneers). Helping students to become aware of the economic promises and challenges of the colonists and pioneers and to understand how they used productive resources to satisfy their economic wants and needs was the goal of the unit. The children worked in groups in order to create an awareness for the need of division of labor, specialization, and cooperation. We built a fort in our room from stockade fencing and set up learning stations with numerous group activities to perform. We named our fort "Fort Knowledge-Center for Discovery and Exploration." It promoted interest in pioneer living with the many resources of books, filmstrips, task cards, and so on, which it offered daily. We pretended to live as the pioneers did. We cooked and consumed typical pioneer food. We wrote stories reflecting our understanding of the hardships and dangers faced by the pioneers as they attempted to raise their standard of living. Pioneers had to have natural resources, human resources (labor), and capital goods (tools) in order to satisfy their wants. A trip to the Cowboy Hall of Fame highlighted this unit.

Enterprising Americans today (free-enterprise society). Several goals were developed for this last unit: to become aware of the economic promises and challenges of today's free-enterprise society; to understand how productive resources and human economic contributions over the ages have given us a high standard of living to enjoy today; and to become aware of the vital importance of active and responsible consumers, producers, and investors in today's society. During this unit we concentrated on everyday economics as we studied our rights, roles, and responsibilities as consumers, producers, and investors. We have the economic promise of natural and human resources as well as many scientific and technological advances in capital goods. We are economically challenged to make wise decisions as we consume our scarce resources. Our large population of consumers has created supply and demand problems for producers. The topics we took up to better our understanding of economics in our world today included: Harnessing the Sun, Wind, and

Water; This World of Energy; Conservation of Natural Resources; The Problem of Pollution; Feeding a Growing Population; Scientists and How They Help Us; People Serving Our Community; and Inventions That Work for Us.

Conclusions and Evaluation

As a result of our study of "Economic Promises and Challenges of Productive Resources" we understood many factors which have contributed over the years to America's economic well-being and our high standard of living. We realized more than ever before how significant every person's economic contributions are to society, and we were so inspired with the significance of our discoveries that we wanted to share our knowledge of and pride in America's great story of historical and economic growth with others. We prepared and presented a twenty-minute choral reading entitled, "My Country, Tis of Thee." Thirty-two students volunteered their time to perform the choral reading for hundreds of people. Word of the students' program passed quickly from one civic group to another. We received and accepted numerous requests, and so were able to share our knowledge and understanding with even more people. The students' sense of self-worth and of the importance of the program were boosted by requests originating outside our local community—from KOCO-TV, Oklahoma's speaker of the House of Representatives, and the United States Senate. Perhaps the greatest thrill to the students was the telephone call from the White House, requesting a videotape for the president and first lady of the United States.

The memories of this unit will last a lifetime for me and most of my students. This was the most rewarding year of my career. I felt proud and privileged to have the opportunity to work with such sincere, enthusiastic youngsters. The children's test scores, their behavior, attitude, sense of responsibility, and active participation as young citizens made me confident that the future of our great land will be protected, defended, and upheld in the hands of these young Americans.

A Voyage to Economic Literacy

An Economics Unit for the Fifth Grade

Doris Morris

Warner Elementary School, Wilmington, Delaware

Introduction

As a classroom teacher, I have discovered a variety of ways in which learning can be extended beyond the four walls of a classroom. My most recent classroom activity involved the adoption of a Norwegian auto liner, the SS *Karinita*. Study of this ship led us into a study of the port of Wilmington. From there we continued on with a study of international trade. What I began as a pleasant project, planning to use a minimum of class time, turned into a year-long study, reaching far beyond what I had ever anticipated. Once we got started, generally one day a week throughout the whole year was devoted to studying something related to ships, ports, or trade. A multidisciplinary approach was used, combining reading, language arts, and economics.

The thirty-six fifth-graders involved in this study were of average and above average reading ability. They came from mixed racial and socioeconomic backgrounds. About one-third of the class lived in the city near the school, and about two-thirds were bused from the suburbs to school. At the beginning of the year, the biggest single factor they all shared was enthusiasm. By the end of the year, they also shared a knowledge of basic economic concepts. Their post-test scores on the *Test of Elementary Economics* indicated an increase of over 300 percent, which I thought was absolutely phenomenal.

Description of the Project

When I thought about adopting a ship, my overall purposes centered around both language arts and economics. I wanted the students to learn to collect information from a variety of sources and present gathered data in an interesting way. I also wanted to introduce the concepts of competition, specialization, and productive resources, as they applied to the auto liner and the auto liner company.

To begin our study of the *Karinita*, we had a brainstorming session, listing all the things the students wanted to know about the ship. We then divided the questions into various categories, with a group of six students each agreeing to find the answers to a particular set of questions. Later they planned to share

their answers with the rest of the class. After each group had received its questions, the next month was spent gathering information by means of letters, interviews, and speakers. The students soon discovered that finding answers to some of the questions was challenging. Mr. Govertsen, my neighbor who works at the port of Wilmington, helped tremendously. He came and spoke to the class, showed a film about auto liners, and gave the students a brochure about the *Karinita*.

Finally, in November when the *Karinita* came into the port of Wilmington, we went to visit the ship. What an exciting day! Mr. Govertsen, along with one of the crew, led the class on a tour through the entire auto liner. Not one part of the ship did we miss! Then the class met the captain and the crew, and the captain invited the class to have refreshments with them in the galley. It was really an eventful day. Even the newspaper and the local TV station were there, filming the students and crew. However, our adventure was not over yet.

The day the class was visiting the *Karinita*, the longshoremen went on strike and were not unloading the cars. This event aroused a lot of questions from the students. In addition, as the class was riding through the port to get to the *Karinita*, they saw a lot of things which stirred their curiosity. They had all kinds of questions about things about which I really did not know. As a result, when the class finished sharing the information each of the groups had been gathering about the *Karinita*, we began to study the port of Wilmington.

As I prepared my lessons about the port of Wilmington, I set as my general objectives that the students would be able to:

- Describe the factors necessary for an active, economically successful port;
- Explain how the following principles operate at the port of Wilmington: supply and demand, competition, specialization, and multiplier effect;
- Identify land, labor, and capital resources at the port of Wilmington.

In order to accomplish these objectives we engaged in a wide variety of activities—read material published by the port of Wilmington, studied maps, role played, and set up an assembly line, to name just a few. The students kept all their papers about the port in their notebooks as we went along, and at the end of the study they combined these into booklets. As a culminating activity, the class wrote and produced a slide presentation about the port of Wilmington.

Again, as part of our study, we went to visit the port, but this time instead of our just visiting one ship, a guide showed us around the entire port. It was an extremely enlightening trip. The students were particularly fascinated with the different goods that were imported and exported. They had never before seen goods like gypsum and cocoa beans. They had never dreamed that the orange concentrate used locally by the Coca Cola Company came from Brazil, not Florida, and they were surprised to discover that the fresh Granny Smith apples they had been buying at the supermarket came from New Zealand. One

item in particular caused a lot of curiosity. The students wanted to know why Delaware, one of the leading poultry producers in the United States, imported eggs from Israel.

As a result of the students' curiosity about the goods at the port, I decided to follow up our study of the port with an introduction to international trade. Since my knowledge of foreign trade was limited, I used a booklet entitled *Trees and TV in the International Marketplace* that I obtained from the Washington State Council on Economic Education as my primary source of information and ideas. I found it a very valuable resource. My general objectives for this study were that the students would be able to:

- State why countries trade;
- Identify the costs and benefits of interdependence;
- Explain the function of money in world trade;
- Explain how trade restraints affect trade.

During this unit we again carried out many different kinds of activities. There were readings, simulations, a survey, and a debate. Also, as in the port study, the students kept all their papers about international trade, and at the end of the unit they combined them into booklets about foreign trade.

As the culminating activity of this study, the students were given the task of creating games in which the players had to use the knowledge of foreign trade that they had acquired. They had to write the directions for their games so that players would be able to play the games without asking any questions of the persons who had designed the games. Then they played and evaluated each other's games. It was an excellent way to review all they had learned.

Finally, to conclude our year-long study, we had an unusual and thrilling experience. The class went to Philadelphia where we were picked up by a tug and shown around the port of Philadelphia. Touring this port was an interesting contrast to touring the port of Wilmington. As we cruised around the river, one of the crew pointed out the different sites and told us about the various ships on the river. It was great! Then the captain allowed some of the students to steer the tug and talk on its radio. Also, the cook served all of us lunch in the galley. It was an experience none of us will soon forget—a terrific ending to a terrific year. Both the students and I had a good time and learned a great deal.

Summary and Evaluation

As part of the formal evaluation of my students' economic knowledge, I gave the *Test of Elementary Economics* published by the Joint Council on Economic Education. The pre-test was given in September and the post-test in May. On the pre-test the mean was 8.97 and the median and mode were each 9. On the post-test the mean was 37.89 and both the median and mode were 38.

It would be unfair to say, however, that all the knowledge that was gained

resulted totally from the study of the ship, the port, and trade units, since all of the students were also involved in a mini-society (Tiny Town). Every other Friday, as part of the mini-society unit, I taught economic principles as they related directly to our society. Also, the students all saw the *Trade-off* series and took part in discussions of these films. Thus, some concepts such as scarcity, competition, specialization, goods and services, money, and supply and demand were discussed many times in various ways. Undoubtedly, the ship, port, and trade units reinforced what the students were learning in Tiny Town and vice versa. Consequently, it is difficult to determine exactly how they gained their knowledge, but the important thing is that they did learn economics.

Other activities in which the students were involved also helped me to evaluate their learning. For example, their notebooks, the writing and producing of the slide presentation, and posters on which they imparted information were all indicators of what the students were learning. More specifically, after we had had a very heated discussion of trade restraints, one of the students wanted to know whether we could debate the issue. Not having had any training in debating, I called Dean Sommers, chairman of the Committee in Support of Delaware Forensics. He came to school and taught the students some of the basics of debating. Our resolution was: "Resolved: trade barriers should be put on goods coming into the U.S." The class divided into two groups, the affirmative and the negative, depending on their personal feelings. The next week was spent on gathering information to support whatever view the students held. Then each side chose two people to represent them in the debate. On the day of the debate Mr. Sommers came back and judged it. He requested the students who were not debating to take notes as if they were judging, too. At the conclusion of the debate he went over his notes in detail with the class and told them exactly how and why he scored the debaters as he did, asking the class to compare what they had written with what he had written. The notes not only showed that the students understood basic economic concepts, but also that they had developed critical thinking skills and knew how to categorize and compare and contrast information.

Then, too, my observation of the students and the students' own discussions and remarks were revealing. Their curiosity and enthusiasm were limitless. Periodically, the students were asked to perform self-evaluations, as well as evaluations of what we were studying. These were positive. Even our guest speakers were surprised at how informed, interested, and enthusiastic the students were. One man remarked that he never knew elementary kids knew so much and could ask so many questions.

The students' interest carried beyond the classroom, too. The class developed a new interest in current events. All year long students would voluntarily bring in articles from magazines and newspapers about ships and ports and, later, on trade. When we went to the Smithsonian Institution on our annual science and social studies field trip, for the first time the students were interested in seeing the ships and the maritime exhibits.

In addition, parents' comments helped me to evaluate the study we were

doing. Throughout the year, when I met parents, they made positive comments about our study. At the conclusion of this year's annual Tiny Town session, when parents visit, I showed the slide presentation about the port of Wilmington. The parents were impressed with the knowledge their children had gained. Many made comments such as: "My son has really taught me a lot this year." "Our whole family has learned so much about the port of Wilmington we never knew." At the end of the year I received some notes commenting on the study. These definitely indicated the parents thought the students had profited. As one parent said, "... this experience will be remembered long after other, more conventional lessons have receded into consciousness."

In conclusion, I believe the fifth-graders who participated in this study, who are the potential decision makers of our country, now have a basic foundation of economic concepts and reasoning on which to build and to use in helping them meet their responsibilities as intelligent, informed citizens. I know that, as we travel back and forth to school and visit around the city, both the students and I will look at the ships on the Delaware River and the port in a new way, with new insights.

Learning Economics by Creating a Country

A Fifth-Grade Economics Unit

Jan Kessler

Morrison Elementary School, Fort Smith, Arkansas

Introduction and Goals

As I began to consider the teaching of economics on the intermediate level, there were two major concerns that I wanted my program to deal with effectively: to approach economics in a highly innovative manner and to integrate it into all areas of my curriculum. I was delighted when I discovered a commercially prepared unit entitled "Create a Country" because I felt it could be expanded to include the study of economics. Furthermore, I knew I could make economics meaningful to my students at Morrison. Most of the parents in the district are blue-collar workers. Some were out of jobs and others were feeling the effects of the current recession. I hoped that some of the concepts

to be learned would give students a better understanding of why Dad or Mom had been laid off and why candy bars might be scarce items in the family pantry.

As my students created a new country, they learned:

- The core of most economic issues in a market economy is the need to make intelligent choices among competing alternatives.
- Satisfying people's wants and needs is the ultimate purpose of economic activity.
- The political and economic systems of a country must be compatible.
- It takes natural, human, and capital resources plus entrepreneurship to produce the goods and services wanted and needed by consumers.
- Because of unlimited wants and scarce resources, consumers must make choices.
- Income used for one purpose cannot be used for something else.
- The basic characteristics of a market economy are:
 - Private ownership of property;
 - Economic gain as a motivating force;
 - Consumer direction;
 - Competition as a regulating force;
 - A minimum of government influence and control of the market;
 - Stable government by law.
- Specialization in production leads to interdependence and trade.
- Money facilitates the exchange of goods and services.
- Financial institutions serve as the connecting link between savers and investors.
- Good systems of transportation and communication are needed to keep economic systems running smoothly.
- Individuals, families, and nations have economic goals which they strive to attain.

Launching the Study

For the first few weeks of school, we spent a part of our social studies time in learning basic economic concepts. We applied these concepts to everyday situations in the lives of the students in order to give them meaning. As we worked on creating a country, I realized that I would need to reteach some of the more difficult concepts. For each lesson in our unit, I posted objectives and discussed them with my students. The children knew exactly what was expected of them as I taught to the objective, using a variety of materials and teaching techniques. Lessons were enhanced by guest speakers, a field trip, filmstrips, books, newspaper and magazine articles, and so on. I tried to stay away from "purple demons" (our traditional worksheets) as much as possible. Students worked a great deal in small groups or on individual assignments in which they applied economic concepts in a practical way.

Before we started creating our country, students needed to learn to make rational choices as we encountered all of the questions we would have to answer in this venture. We prepared a list of decisions we would have to make as we developed our country. These dealt with the country's location, physical characteristics, economic system, productive resources, production, dependence, trade, transportation, communications, and individual families' wants and needs.

Students could see that some big decisions would have to be made so they were ready to learn the five steps in economic decision making: stating the problem, identifying goals, considering alternatives, analyzing consequences, and choosing the best solution. These steps were applied to some classroom situations to help students get a better grasp on how to use them in our unit. As we proceeded to solve problems that arose throughout the unit, individuals, groups, and the whole class continued to use these steps to make the necessary decisions about our created country.

Learning Activities

A few of the learning activities and economic concepts developed in the unit are described below:

Location. The first problem my students decided to tackle was determining a location for our country. At the same time we considered the physical characteristics such as waterways, landforms, and the like. As we made decisions, we learned ways that climate affects our lives. We discussed the advantages and disadvantages of being accessible to other countries. For example, we had to consider proximity to the Middle East and oil because students were concerned about energy resources. A committee was appointed to use their map and research skills to pinpoint a location for an island country with a warm climate. After much study of *World Books*, climate charts, atlases, and so on, the committee proposed a location in the Atlantic Ocean at 40° West longitude and 20° North latitude. The Tropic of Cancer would run through our country. Since the country would not be landlocked, the potential for trade would be great and this fact should help to build a strong economy. Our class unanimously voted to name our country "Economica." Someone then suggested that we give economic names to the rivers, lakes, and other natural features. We all enjoyed thinking up names such as Mount Inflation, Recession Valley, and Depression Ravine. The children giggled at the thought of the Circular Flow Lake. Their creativity and use of terms surprised me. What other country has rivers called Supply and Demand that feed into the Bay of Goods?

Economic system. In this section of the unit we looked at command, market, and mixed economies; free enterprise and capitalism; government; goods and services; and taxation.

The concept of consumer direction was difficult for students to comprehend. The idea of the dollar or consumer vote was beyond their immediate grasp. To further their understanding, we pretended that Economica had a major bicycle-manufacturing business. We called it the FGS (Fifth-Grade

Students) Manufacturing Company. We decided the factory could make standard three-speed and ten-speed bikes. Each student assessed his or her financial status and chose the type of bicycle that would be best. Students were to cast their consumer votes for the type chosen. Since most of the class chose the three-speed type, they could understand that their choices would tell the producer which bicycle to make. We continued to use the bicycle plant in a discussion of the basic principles of supply and demand. Opportunity cost was also introduced to help students realize that money spent for one thing cannot be spent for other things we want.

Each year I take my class to visit the Louis B. Tilles Museum of patent models, which is located in our city. The museum houses miniature replicas of patented models. We planned the trip again this year from the viewpoint of how government helps to protect the rights of inventors. Students were fascinated with the models and with the idea of patents. It became highly prestigious in class to find a patent number on some object. Since the children were so excited over patents, we did an activity in which each child invented something. We set up the Economica Patent Office to protect the rights of our inventors. Each patent applicant was required to present a model of the invention before it could be given a number. Students came up with such ingenious ideas as an Atari watch, an umbrella tree, and colored peanut butter.

Natural, human, and capital resources. As we began to think about the resources we wanted for our country, I realized that students needed to review the types of productive resources. I used a picture of a piece of furniture to initiate a discussion of the three types of resources used in making it. Students listed such things as soil and water needed to grow trees for lumber (natural); lumberjacks and furniture factory workers (human); tools of the lumberjack, trucks for hauling, and equipment and tools in the furniture factory (capital). We then took a more thorough look at each type of resource.

For example, we considered natural resources from which we get the raw materials for production. We played a game in which I divided the class into two teams. Each team met and brainstormed a list of possible natural resources that a country might find useful. They had ten minutes in which to think of these. Each team then read its list to the class. The next step was to categorize the resources on each list as exhaustible, renewable, and inexhaustible. Since students did not readily understand these terms, I posted examples of each type on the bulletin board. Students then cut out their own examples from old magazines and posted them under the appropriate headings. They were then ready to categorize the resources from their lists and explain why they had chosen each. Their explanations were helpful in evaluating their work. This activity also gave them an opportunity to verbalize the concepts.

Productive resources: agriculture and industry. As creators of a new country, we had to answer the three big questions that every society faces—What do we wish to produce? For whom do we produce it? How do we produce it?

Students began analyzing Economica to determine what types of goods could be produced to the greatest advantage. After studying the climate and

available resources, they agreed that their country was well suited to agriculture. Crops that could be grown were cotton, fruit, vegetables, and sugar cane. There would be a demand for all of these crops from the country's inhabitants. The cotton could be used in making clothing and the other crops could help meet the people's basic need for food. The sugar cane could be used to make enough sugar for Economica with some left over to export to other countries.

Economica would have a large enough labor force to carry on the agriculture and industries we had chosen. A question arose concerning job skills. Several of the girls in the class began comparing babysitting wages, and we talked about the demand for these services. Many of the girls said they had to go out of the immediate neighborhood to find such jobs. We wanted Economica to have an educational system that equipped people with the skills they could use in the jobs that were available; they would not have to go to other countries to find jobs. The boys in the class countered this line of reasoning with the fact that they receive very low wages for mowing grass in our neighborhood because there are so many boys seeking those jobs. By this time, students realized that every economic decision that is made has some kind of effect on many areas of the economy.

Interdependence and trade. In this part of our unit we explored interdependence, money systems, exchange of goods and services, and banking. As we talked about dealing with other countries, someone asked if we'd have any tourists coming to Economica. For a class project, we wrote to the Arkansas Department of Tourism to find out how much revenue the state gains annually from tourism. This would give us some idea of how important it might be to the economy of Economica, since it is patterned after Arkansas. Students were amazed at the amount of money received from the tourist business. We studied our map of Economica to determine what tourist attractions we'd have. A committee made a chart listing the potential points of interest—Inflation Mountain, Lake Circular Flow, Supply River, Demand River, and so on. These attractions, along with our warm climate and easy access, could bring in a good-sized income from the tourist trade. A student asked if we might have a Disneyland. I pointed out that the Disney World Corporation might not want to get involved in foreign trade. Several of my more enterprising students surprised me by meeting at recess and designing their own "Economicaland." The rides were given names like Circular Flow Roller Coaster, Supply and Demand Snack Bar, and the Free-Enterprise Pinball Alley. I must admit it sounded like an amusing place that would attract the local population and possibly even some outsiders. Students designed a travel brochure to attract tourists to Economica.

Transportation and communication. Students became very active with communications in this phase. Television station ECON soon went into operation. Each day for the remainder of our unit, the station aired economics programs which highlighted the "term for the day." Students had to be able to write the meaning of the term in their own words and eagerly looked forward to each day's program to see if they already knew the meaning of the term. Radio station COIN began operation; our school's public address system was

"borrowed" for a short period each day. Students took turns giving the "Economic Thought for the Day" over station COIN. Two copies of the *Economica Times* were published. A regular newspaper staff gathered news for each issue. Copies were sent home to parents so that they could follow the progress of our unit.

The family as a consuming unit. For the final section of our unit, I wanted to narrow our thinking down to households and study how the family unit would fit into Economica's free-enterprise system. I decided to approach the topic from the standpoint of economic goals. Our first task was to decide on the goals for an average family living in Barterville, Economica. My creative students gave the family the surname of Entrepreneur. We had already decided that the family income would be earned by the father, who worked on the sugar cane farms. Part of his income would be used to meet the basic needs of food, clothing, and shelter. Mr. Entrepreneur would pay taxes to help finance such things as the children's education and the highway system. He would put some of his money into a savings account at the bank; this money could be used by entrepreneurs who would pay interest for its use. The bank would pay interest to the saver so that his money would earn more for him. Money would be available for businesses to use to keep production moving if Economica's residents were to have job security. By now students realized that we had gone back through the circular flow of income, goods, and services. I reminded them that the end purpose of economic activity is to satisfy people's wants and needs for goods and services. We felt that the economy we had established in our new country would do just that!

Culminating Activity

The grand finale for our project was an International Fair. Each student was asked to design a country and set up a booth at the fair. I prepared a work packet planned to guide students in their decision making as they developed their own countries. The packet asked students to prepare a map of the country and a fact sheet describing natural resources, population, economic system, and form of government. Students also designed flags, brochures, or posters to attract tourists to their country, a money system, and so on. In other words, they would follow the steps we had already gone through in creating Economica. It was understood that neatness, accuracy, and creativity would be rewarded.

On the afternoon of the fair, grades 1-6 came to visit the booths where students explained their work and answered questions. Over three-fourths of my students' parents attended the fair, along with special guests from our district's central office. Everyone, including myself, enjoyed browsing through the displays of newly created countries and talking with the children about the economics they had learned. We also had an exhibit for Economica in which we displayed the work the class had done throughout the unit. I was most impressed with the positive attitudes my students had toward economics after working on a project for a whole year.

No City Is an Island: A Study of Interdependence

An Economics Unit for the Fifth Grade

Nancy Braden

Barling Elementary School, Barling, Arkansas

Background and Goals

My fifth-grade class consisted of twenty-six students whose reading levels, at the beginning of the year, ranged from second-grade to fifth-grade. They were from low to average socioeconomic levels, with very little background in economics. Our school is located in the small town of Barling, Arkansas, with a population of 3,761. Barling is a part of the Fort Smith metropolitan area. The two cities are separated only by a city limits sign. Barling Elementary School is a part of the Fort Smith school system, and our students go to junior and senior high school in Fort Smith. Ever since I have been teaching at Barling Elementary School, I have sensed that the residents of Barling want to feel independent of Fort Smith. This attitude seems to be deeply felt, as they often appear to be uninterested in anything in the rest of the state or the world. At the same time, some Fort Smith residents can see no benefits from the connection with Barling. I felt a need to close this gap; therefore, I began the study, "No City Is an Island—A Study of Interdependence." I felt that I could teach basic economics within the framework of this unit. I wanted this study to give the students an understanding of the real world affecting them.

One of my goals for the unit was to have the students understand the interdependence of the two cities. I wanted the students to realize that they, as consumers, were dependent on Fort Smith, that their parents were dependent on Fort Smith, that Barling city government was dependent on Fort Smith, and that businesses were dependent on other businesses. I also wanted them to explain their roles as decision makers in the market and to explain the interdependence among government, household, financial institutions, and business.

Launching the Study

I took advantage of a coming city election by using it as the introduction to this unit. The second week of school the polls were open for the citizens' ap-

proval or disapproval of the annexation of three thousand acres of land to Barling. When I questioned my students about the election, they had no idea what I was talking about. I offered them ten bonus points on their social studies grades if they could tell me the purpose of the election the next day. The following day most of the students had the information. Very few of their parents knew anything about it, so sixteen students called City Hall. Several others called some of the city directors. One brought in a newspaper article on the subject. The students were concerned that so few people seemed to be interested in the election. After some discussion, we decided we could do something to help, so we made fliers reminding the people to vote and when to vote. The children passed them out in their neighborhoods. These few simple activities had attracted the students' attention. Now we had to plan activities that would keep their interest level high.

For background, I read the book *Life on Paradise Island* by Wilson and Warmke to my students. This book depicts the changes that took place as a primitive economic system changed into an advanced economic system. In the story, the decision making became more complex as the system became more interdependent. During the discussions following the reading of each chapter, we compared Paradise Island to Barling. We tried to imagine life in Barling as if it were completely independent of the rest of the world. As the citizens of Paradise Island became more dependent, so did Barling's citizens, in our imaginations.

I also read to the class a children's version of *Robinson Crusoe*. The students were quick to point out the difference in Robinson Crusoe's lifestyle while he was stranded. I explained to them that his standard of living changed because he had fewer goods and services from which to choose. At this point various students could tell of ways Crusoe improved his own standard of living during his stay on the island. They realized that there were times when he had to make the decision to save some of his consumer goods, so his time could be spent developing improved capital goods. In the long run, this choice would improve his standard of living. I asked how his standard of living would have been affected if he had been able to trade with other people or other countries. The students could easily see the benefits of such trade.

We read the booklet *Alice's Big Story*, published by Wheelabrator Frye, Inc. This booklet illustrated causes for falling standard of living, showing that all sectors of an economy must accept responsibility for the decline, as well as make an effort to change it. The students realized that this was an example of interdependence.

Learning Activities

To move on with the study, we decided to create Mini Barling, with an elected mayor and four elected city directors. These officials would be the leaders and hold meetings. The students who wanted to run for office collected signatures on petitions in order to have their names placed on the ballot.

Before the election, I talked to the students at great length about the characteristics of a "good" elected official, as students of this age group are likely to vote for their best friends. After a campaign with speeches and signs, a mayor and four city directors were elected. (This form of government was patterned after the Barling and Fort Smith city governments.) The parents' approval of our plan was evident in their arrangements for the newspaper photographer to take a picture of the mayor and the four city directors.

Our plan was to hold board meetings with the citizens present and raising questions. The mayor would appoint committees to obtain information. A city director would be in charge of each committee. The committees could find information through filmstrips, books, pamphlets, resource people, and trips. We would also use newspapers and radio and TV news to add to the information found or to raise questions. I would act as the city administrator so that I could bring up subjects, ask questions, or do anything else that might be necessary.

We had several city directors' meetings trying to organize our study into an outline. At one of the meetings, it was suggested that we organize our study like the story of Paradise Island, the book we had read earlier. Everyone liked the idea, and we began working on our outline. Some of the students suggested that the circular flow, as described in the story, would include everything we needed to know. The sections of our study became *the households, the business world, money and financial institutions, and government*. A few of the learning activities are described below.

The households. The *Trade-offs* lesson "Choice" made the concept of opportunity cost clear to the students. After seeing the children in the program making decisions about what to give up, my students could easily think of many times when they had to make similar decisions. They pointed out the opportunity costs they had paid. One of the students told about his family's experience in buying a new house. He said they had looked at a lot of houses in Fort Smith, but the one in Barling was priced lower and it was just as nice with as much room. Their opportunity cost had been a house in Fort Smith. The house in Barling was actually closer to the parents' work (in Fort Smith) than the house in Fort Smith. The Barling house was also near the shopping spots preferred by the family. The students came to the conclusion that we all make choices and have to pay opportunity costs.

The business world. In this part of the unit we studied retail business, farm industry, and service and manufacturing industries. One day a student asked, "Who produces the goods for the stores to sell?" This started inquiries as to who really does produce the goods in a grocery store. After we had gone through a long list of goods found in the grocery store, we found that most of them could be traced back to the farmer. As we discussed this further, we decided it would be a good idea to ask a farmer to visit our class, even though that hadn't been in our original plan. When the students started to make a list of questions, they decided they didn't know enough about farming to ask questions. Since I knew the owner of a small cattle farm in the southern part of our

county, I called him and told him about our study and asked if he could help us. Before Leo Allison (or Farmer Allison, as the children called him) came, we held a meeting to further discuss reasons we needed to know about farms. The news media's coverage had made the children aware of some of the agricultural products exported by Arkansas farmers. We had also studied this in Arkansas history. The children pointed out, in addition, that farms don't exist in cities. Thus, we saw that cities were dependent on farms.

When Mr. Allison arrived, he was dressed as a farmer when working in the fields, but he told us that many big farms are incorporated and the farmer is more of an executive. The farmer may not be in the fields a great deal but may act more as a business manager. Like any entrepreneur, a farmer must make decisions and take risks.

There are two main factors affecting the farmer over which he has little or no immediate control. These are the weather and the government. For example, the rules and regulations regarding sprays and herbicides and the embargoes on farm products such as grain are not under the farmer's control.

Mr. Allison said farmers are having a difficult time right now because of the high interest rates, but sometimes there are special loans available to them. He went on to explain that present-day farmers require such expensive machinery that they must borrow a lot of money. He said the farm industry is very dependent on such industries as trucking, fertilizer, and heavy machinery. He explained that because of the high cost of the equipment some smaller farmers, such as he, buy certain pieces of machinery and do custom work for other farmers. He himself has a good hay baler, and he bales hay for other people, he explained.

When Mr. Allison had completed his presentation, some of the students expressed surprise to learn that farming was so complicated. As one student put it, "A lot goes on before we ever find the goods in the market."

Money and financial institutions. The functions and types of money, the background, beginnings, and functions of banks, and the structure and purpose of the Federal Reserve System were areas of study in this section. The *Trade-offs* lesson "Why Money?" and the filmstrip *Different Kinds of Money* introduced this unit. Afterward the citizens of Mini Barling had a meeting to suggest topics they thought should be explored. The students decided to form committees and do research. They could use current news from TV, radio, and newspapers to find current influences. Finally they thought a resource person from a financial institution could be a big help. While I made arrangements for a banker to come, "Mayor" David Fudge appointed four committees with a city director in charge of each. Then he checked in the media center and borrowed two sets of filmstrips, *Dollars and Sense* and *Fundamentals of Economics*. The students also checked out books and pamphlets. Some of the material was used by more than one group because it contained information that overlapped; however, each group chose certain materials as their main source. It was interesting to see how they helped each other by calling attention to information that could assist another committee.



REVIEWING THE FUNCTIONS OF MONEY

Government. The students had been eager to get into the government section of our study ever since our initial activity and after hearing it referred to by our resource people. We studied not only our city government (Barling and Fort Smith) but also our school system and state government. We studied many facets of our local government, ranging from the jails, taxation, police and fire protection, to economic growth. However, the most enthusiasm was generated by a visit to our class from Arkansas Governor White. When the governor called a special session of the legislature to discuss how to appropriate the money the state would receive from the federal government for the oil and gas leases at Fort Chaffee (adjacent to Barling), the students asked if they could write and ask the governor to visit our class. When he accepted our invitation, the students began to think of the questions they wanted to ask him. They thought of all the issues that had been before the special legislative session and some that had come up since. They wanted to know more about those issues that would have a direct effect on Barling and Fort Smith.

As word spread of the governor's intended visit, the whole school was caught up in our excitement, as well as the school and city officials. On the day of the visit, Mayor Jerry Barling and City Administrator Bob Turner were at the school to welcome the governor on behalf of the city. School Superintendent C.B. Garrison, Deputy Superintendent Ralph Riley, Director of Instruction Wallace Floyd, and Elementary Supervisor Ernestine Hunter were there on behalf of the school system.

After all the official greetings, including those from Mini Barling Mayor



STUDENTS LEARN EDUCATION IS NOT FREE

David Fudge and from Trang Cung, the student who had written the letter, Governor White came to our class area. David called a meeting of all the Mini Barling citizens. He called the meeting to order and introduced Governor White to each citizen of Mini Barling. Then they presented him with a certificate declaring him an honorary citizen of our classroom city.

When all of these formalities were over, Governor White talked to the students about the importance of economic education. He told them that what they were doing would help them be better leaders in a few years. He said if more people understood our economy, we might not be having as many economic problems as we are. Then the governor proceeded to give the students a greater understanding of many of the topics we had been studying: the Arkansas Industrial Development Commission, the importance of the Arkansas River for attracting industries, the truck weight limit, and the 10 percent usury law.

In my opinion, the governor's visit will have long-lasting benefits. The students were able to see, at first hand, the vast amount of knowledge a governor must possess. As some of them put it, "The governor has to know some of everything the other resource people talked about. He has to know about business, financial institutions, households, and government. He was a perfect resource person to end our study." Some of the issues he talked about were those on which he and the legislature had not been in agreement. In some cases they had compromised, while in other cases the final decision had not yet been made. This helped the students to see that it is important to know the can-

didates for all public offices and make educated decisions at the polls. They could see the checks and balances of the government at work.

Culminating Activity and Evaluation

As a final activity we decided to write a script for a city directors' meeting. I met with the mayor and the four city directors to make an outline for the program. Once that had been done, they began to work on the script. The students' eagerness to share their knowledge and their confidence in their knowledge enabled them to complete the script in only four days, after the plans had been made. They wanted to make a filmstrip to accompany the study. It took a few more days to write a script and draw the little pictures on the filmstrip. Then we had to make a tape to go with the filmstrip. In the setting for the program, a city directors' meeting, some citizens expressed their reasons for wanting to move from Barling to Fort Smith. The city directors, the mayor, the city administrator, and other citizens gave answers intended to convince the people to stay in Barling. Some of the citizens played the role of the resource people who had visited our class.

The final results were a program and a filmstrip in which the students took a lot of pride. They quickly sent out invitations to parents, school personnel, resource people, and Barling residents to attend our city directors' meeting. Our PTA president even had an item printed in the Barling newspaper. Many parents, most of the resource people, most of the PTA board members, and several school administrators came to see our program. We had sent an invitation to the Barling city directors, and five of them were there. Polly Jackson, assistant director of the Arkansas State Council on Economic Education, was also present. Everyone was impressed with the students' knowledge and their ability to analyze situations. Ms. Jackson was complimentary to the children and said to me when the program was over, "Those students really know their economics."

Evaluation was continuous throughout the year as students wrote letters to resource people and many of their English assignments included writing about the economic study. Observation was also a good way to evaluate the students' progress. I don't believe I've ever seen a group mature, take on responsibilities, and make wise decisions as much as these students did. Their attitudes toward the cities of Barling and Fort Smith working together and needing each other were completely reversed. They accepted and understood how interdependent the two cities are. The students were able to define and recognize economic concepts, and they illustrated their comprehension by preparing charts and bulletin boards and by writing letters and papers. They consistently applied their knowledge, especially in making decisions and predicting the outcome of certain events. They could determine the causes and effects of their own actions in the marketplace. They also analyzed the causes and effects of decisions made by the city and state governments.

GOOD IDEAS IN BRIEF: INTERMEDIATE LEVEL

JOHN DELP of the *Englewood Elementary School, Englewood, Florida*, developed a variety of activities to teach economics to his sixth-grade students. Throughout the year, economics was combined with other classroom studies such as mathematics, language arts, speech, home economics, and science. The activity which aroused the most interest was the study of the stock market. Mr. Delp had received some personal prize money as an award for his teaching the previous year. Instead of spending it on himself, he bought an inexpensive share of stock for each of his thirty-two students. The students watched the newspapers daily, looking to see how their stocks fared. The purchase of the stocks aided in developing the students' skills in math, taught them some knowledge of the business world and economics and provided an outlet which generated interest in stocks through actual participation.

THELMA M. BEST of the *Crystal Lake Elementary School, Lakeland, Florida*, gave her sixth-graders an overview of the economic system and helped them determine their role in it. They studied the ways in which they were consumers and looked to the future when they would be producers and voters. The instructor employed a kit called "Disney's Wide World of Economics and Enterprise" to lay the groundwork of knowledge the students needed before they went on field trips to businesses. The students were amazed at their own ability to make production line flow charts after a visit to an ice cream and milk production plant. The local newspaper was used in class as the students studied prices and created classified and retail advertisements. After several very involved lessons in economics, the students greatly needed an organizing factor for the information. The TRS-80 microcomputer provided a tremendously motivating tool for instruction. The students responded positively to the true-false, multiple-choice, and sentence formats. Using the *Basic Economics Test* for a pre- and post-test the instructor found the average change in score was twenty-five points.

JANE C. RUFFA of the *Collegiate Lower School, Richmond, Virginia*, used the social studies text *Cultures of the World* and the *Trade-offs* series with her fourth-graders as she integrated economics with social studies, language arts, vocabulary, and mathematics. Ms. Ruffa creatively developed many coordinating activities to reinforce concepts. In one such activity, her class developed a corporation, "A Rainbow of Recipe Cards." They changed a one-person printing process into an assembly-line form of production. The students did research to determine the cost of a license and materials. A market survey was undertaken to determine whether the product would sell at Collegiate's Village Green Fair. When the survey indicated that there was a market for this product, the students studied the three types of businesses: proprietorship, partnership, and corporation. After they had decided to form a

corporation, they selected a Board of Directors and sold shares of stock. Students applied for jobs, and production began. In the course of the project the students were exposed to the following concepts: wages, stocks, dividends, profit, markets, land, labor, and capital. The students not only enjoyed the learning but they also enjoyed earning money!

WARREN EDMISTEN of the *Sutton Elementary School, Fort Smith, Arkansas*, developed an economics unit entitled "Everybody Wants Your Money" for his fifth-grade class. Mr. Edmisten developed this project after hearing his students talking about the money they had to spend for Christmas. He realized they knew very little about economic decision making and wanted to help them learn about the forces in our economy that are competing for the consumer's dollar. They began their study by analyzing newspaper advertisements and television commercials. Filmstrips and worksheets supplemented their unit. They learned that it is consumer demand for goods and services that helps to determine what will be produced and sold. Another concept they understood was that businesses compete for the consumer's dollar through such means as advertising, lower prices, improved products, efficient production methods, and improved marketing procedures. Several resource people visited the students. A small businessman explained how he must offer competitive pricing and run his business efficiently in order to make a profit. A supervisor for energy services for the Oklahoma Gas and Electric Company explained a publicly-owned utility and monopoly. The students visited bankers and began to see the importance of savings and the relationship between savings and investments. Mr. Edmisten summed up the experience of the semester by stating that the students no longer had an "I don't care" or "What does it matter?" attitude.

DOTTIE BOULDIN, LINDA BUCKALEW, and SHARON JOHNSON of the *Bethesda Elementary School, Lawrenceville, Georgia*, developed "Keeping Up with the Jones' Kids" for students in grades four and five. The multidisciplinary unit focused attention on consumer psychology with special emphasis on fads. Activities in the unit helped the students to distinguish between popular products and competitive brands and to understand how production is affected by fads. The fad emphasis led into a case study of the Little People, the booming industry started by Xavier Roberts and continued by popular demand. Mr. Roberts, once a poor mountain boy and unknown artist, developed Appalachian Artworks, Inc., a company that creates and markets soft-sculpture "babies" that are "adopted" by people all over the world. Through their exciting study of this example, the students learned the meaning of the following terms: factors of production, consumer demand, decision making, choice, opportunity cost, scarcity, supply and demand, equilibrium price, specialization, and competition. The students were given opportunities to apply their learning and had fun trying to predict fads for the future.

BARBARA A. BLAKE of the *Koebel Elementary School, Columbus, Ohio*, created an economics unit entitled "A Tale of Two Cities" for her fifth-graders. The children themselves initiated this investigation for their economic problems unit. The students designated one day as "Big-E-Day." They set goals, objectives, outcomes, and methods to implement and evaluate the unit. With all economic learning listed, the children wanted to compare many things. Thus, a comparison of living in Columbus with living in Cincinnati was born. They gathered information about their city, Columbus, in eight areas: recreation, government, business, industry, food, transportation, housing, and education. Next, a comparison with Cincinnati was needed. Students wanted to visit the city, but they had no funds. The Big P Pencil Company was formed to raise money for the trip. However, the company was a failure because it had competition from another source, the student council, in a small market. These students learned a great deal and gained an understanding not only of how a business is run, but also of the intricacies of a well-planned business. Another business was started and became a success. The students took a three-day comparative tour of Cincinnati.

DEBBIE KIMMEL and DELORES JANES of the *Seiberling Elementary School, Akron, Ohio*, worked together on an economics unit for their sixth-graders. "Help Beet Information" combined the students' interest in plants and gardens with teaching economic concepts. The project involved both staff and pupils, along with parents, the PTA, and other members of the community. Economic concepts were incorporated into every area of the curriculum. After the study had been initiated, the class was asked to package seeds for the Akron Council PTA Children's Garden Fair. This experience reinforced the concepts of service, production, division of labor, interdependence, and quality and quantity. Many students joined the school Garden Club. They produced terrariums of different vegetables and herbs for sale at the Cluster Festival, a city-wide festival involving six schools. At their Economic Center, they displayed collages, photographs, pictures, and economic folders. Many of their plants had died and sales were not as promising as they had hoped. However, the genuine profit came from the positive experience each of these children underwent. Nobody could count the pride, growth, and positive self-concept that these children had attained.

DIANE M. CAMP of *Trinity School, Atlanta, Georgia*, designed an economics unit for her fifth-graders. This project was an attempt to teach economic concepts in a historical setting by enacting a simulation. It was designed to be used by teachers who have not had formal training in economic education, as well as for those who have. This simulation, "A Medieval Fair," was based on the emergence of the market economy during the time of the medieval guilds and fairs, but the activities and concepts could be applied to any historical setting since the emergence of the market economy. The children

studied the medieval history and accompanying economic concepts. They then formed a corporation and shares of stock were issued to raise working capital. Five committees (food, crafts, events, grounds and decorations, and advertising) were formed. Each group, with the help of a volunteer parent supervisor, met once weekly for ten weeks and made all the managerial decisions about what would be done, sold, and so on at the fair. After all the decisions had been made, results were presented in general corporation meetings and approved or revised as needed. Time was then provided for all the food and crafts to be made and for all necessary planning and working for the various committees. The children made literally hundreds of bows and arrows, swords, shields, and coloring books, cooked food for an estimated attendance of six hundred, and obtained donations from local businesspeople. The final result was a colorful and extremely successful day-long fair which all the students of Trinity School attended. Selling their products at prices ranging from 5 to 50 cents, the children actually grossed \$830. After expenses had been paid and the stockholders reimbursed, each child was able to realize \$5.00 profit, and the corporation voted a \$230.00 donation to the Trinity School Capital Funds Drive.



KEEPING INVENTORIES IN CHECK

Lifestyles: Past, Present, Future

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Introduction

The ever-changing nature of our society demands that educators "remain current" in an attempt to help their students prepare for the world they will face as they complete their formal education. Often a look at the past will help to provide an understanding of the present and also assist in anticipating the future. The understanding of economics in our society is a vital part of this preparation.

Since students appear to learn best when concepts are interrelated, this unit was specifically designed to integrate economic concepts in an eighth-grade American history classroom. In addition to the integration of economic concepts, such skills as reading, writing, and spelling were emphasized. Students were therefore not expected to improve skills or learn concepts in isolation, but rather to learn by doing and, through this strategy, gain a better understanding of the relationships which were developed.

Overview

One measure of lifestyle is the ratio of leisure time to work time. This unit was developed to focus on how people worked, dressed, and played in the past and how these practices compared with the present and may do in the future. In order for the students to have a better understanding of contemporary lifestyles, they were assigned various activities related to the investigation of past American lifestyles. The information gathered from the students' research provided a foundation for assessing and better understanding contemporary lifestyles.

As we began to prepare our unit, we were influenced by a Purdue Univer-

sity consumer economist, Leslie A. Bryan, who said, "We spend eighteen plus years preparing our youth for occupations but generally less than a few hours on the value, use, and protection of the assets they will earn during their careers."

Since we knew that our students had ideas of their own concerning the types of lifestyles they wished to pursue and experience, we developed a variety of activities. The heart of the unit was a computer game which we called, "The Budget Balance Challenge." This provided our students with a simulated activity on coping in an economic society. As they participated in the game for the first time, they immediately learned that they could not have everything they wanted. The second time around, therefore, the students were influenced into re-evaluating their priorities and making some necessary economic trade-offs. In addition to the game, we developed a series of pencil-and-paper activities which were designed to expand the learning experiences of our students.

The computer simulation, in particular, was instrumental in informing our students of economic decisions that might have to be made and what their economic future might hold. We were pleased to find that our students seemed to learn that their own personal values and habits were among the determinates of the evolution of America. Furthermore, each student understood that one of the keys to enjoying life was economic literacy!

Although we designed a variety of activities for the unit, not all of them must be taught. It was our intent to provide adequate flexibility to encourage other teachers to select the most appropriate activities, adaptable to their own needs, interests, and courses. For the convenience of our colleagues, we have included a sample set of lesson plans.

Although the materials, activities, and approach were developed for eighth-graders, the unit might easily be adapted to any grade level in the middle school or junior high school.

Ideally, the unit should be programmed to last from four to nine weeks toward the close of the school year. It was our experience that it served to pull together most of the content material that we had covered earlier in the year in a unique and highly interesting fashion.

Goals and Objectives

Students were exposed to and were able to gain insights into lifestyles through an exploration of American history. Through readings, films, study of topics in science and in the social sciences, students wrestled with a series of questions:

1. What is a lifestyle?
2. Do culture and environment affect lifestyles?
3. How have lifestyles changed over time?
4. What is the ideal lifestyle? Is there such a thing for everyone?
5. What will your lifestyle be like in the year 2000?

Responses to this thematic unit were developed through reflective writings, oral discussions, learning centers, learning activity packages, and simulations.

Specifically, we wanted our students to gain knowledge about (a) the concept of a lifestyle; (b) how environment influences one's lifestyle; (c) lifestyles past, present, and future; (d) our economic system; (e) persistent economic problems faced by the individual and society (unlimited wants vs. limited resources); (f) the value of (or lack of) technology as a determinant of the lifestyle of a society; and (g) the fact that lifestyles and societies are historically changing and not static.

Our skills-oriented objectives included the following: taking notes, listening, critical thinking, library and media research, written composition, self-expression, personal decision making, conducting first-hand research, vocabulary development, spelling, self-motivation in planning and carrying out an individual project, group and interpersonal communication activities using the microcomputer, and balancing a monthly budget.

Organization and Procedures

We initiated the unit with an exploration of America's past. Students were asked to distinguish between necessities and luxuries and, after a review of research and investigation of reference materials, were asked to list items of luxury and items of necessity in 1780, 1880, and 1980. Using Sears, Roebuck catalogs from 1897, 1927, and 1982, students were assigned several activities related to comparison shopping.

Our next step had students list businesses found in the community today, fifty years ago, and a hundred years ago. By examining the changes in the business community, students were able to tell how the lives of the people who lived in the community had changed. Another activity that we included required them to read several selected poems, songs, and readings that depicted lifestyles quite different from those of most of our students.

Prior to introducing the computer simulation, students studied vocabulary terms through a variety of strategies which we developed, and, as a springboard to project us into the future, students were asked to prepare a write-on slide that predicted what the future would hold for them. These were viewed by the entire class, with time allowed for explanation and discussion.

Although many of the activities were completed by all class members, we also provided a variety of supplemental activities for individual work. Therefore, many of the students chose to work independently with the learning activity packages we had developed, depending upon their particular needs and interests.

The Budget Balance Challenge

This was developed as a computer simulation to allow students to respond to questions related to the type of lifestyle they wished to pursue. Based upon

their answers, dollar amounts are displayed at the end of the game. As the calculations are completed by the computer, students learn immediately if their wants exceed their projected incomes.

Students may play the game as individuals; however, a new dimension can be added by pairing students as if they were married. The game may be played with the existing data or changed to fit geographic differences by changing the dollar amounts. Teachers may also wish to attach a printer to the microcomputer so that students are provided with a hard copy of the final dollar amounts displayed by the computer.*

Related Student Activities

Each student was provided with a Student Project List for selection of an individual project. We included fifteen specific projects, some of which are listed below:

- Research an occupation you are interested in pursuing. Write letters, conduct interviews, and read brochures about this occupation. What is the probable future of this occupation? How might securing this occupation affect your future lifestyle? Prepare a report using pictures, slides, written work, and so on.
- Prepare a report about jobs that no longer exist or are greatly reduced in number; e.g., pony express rider, cooper, blacksmith, etc. Why did the demand for these jobs change? How has society changed?
- What is the "cost of living"? Do a survey of local food, transportation, housing, medical, utilities, insurance costs, and the like. Prepare a chart comparing your local costs to the national average.

In addition to the Student Project List, we also developed enrichment activities for the entire class. Throughout our unit, we invited several community resource people, including bank officials, representatives of charitable organizations, and others, to discuss such economic concepts as the role of taxes in society, money, banking, credit, and the consumer price index. Further enrichment activities directed students to develop crossword puzzles, list people who had made contributions that affected lifestyles in the nation, and explain how such contributions affected an individual's lifestyle.

*The Budget Balance Challenge game is in Applesoft BASIC and will run on a 48K Apple II Plus or on a 48K Apple II that either has an appropriate language card or has Applesoft loaded. The operator is directed to boot the disk by typing PR#6, pressing RETURN, and then typing CATALOG and again pressing RETURN. Next, the operator types RUN BBC, presses RETURN, and follows the prompts. The program is not protected. A copy of the diskette was included with the full report filed in the National Awards depository at the Milner Library (see address on back of title page of this booklet). Prospective users may also write to Linda Hyler, South Junior High School, 2734 Louisiana Street, Lawrence, KS 66044, for instructions on obtaining a copy of the diskette at cost.

Evaluation Strategies

Students were evaluated on their completed projects, their class assignments, and the results of a unit test which we developed.

TRADECO: A World Trade Economic Simulation Game

Ann S. Waldrop

Forest Meadow Junior High School, Dallas, Texas

Introduction

This economic simulation game developed out of an offer I presented to my students in the fall semester of 1981.* I had explained that I would be integrating economic concepts into the course curriculum throughout the year. After about three months had passed and the students understood some of these concepts, I informed them of the awards presented by the Center for Private Enterprise and Entrepreneurship at Baylor University, sponsored by the Texas Association of Business. I explained that the entries of winners at the state level would be forwarded to the Joint Council on Economic Education's National Awards Program for the Teaching of Economics as well. In short, as an incentive, I offered an equal share in the award money to anyone interested in working with me on an economic unit. Two students† decided to "go for it."

From the outset, the two students wanted to create some kind of game that would portray situations similar to those found in the world today. They modeled the location of the simulated nations from countries in the Caribbean but chose economic conditions that exist in countries throughout the world.

*I made this offer as a result of the encouragement and support of Stephanie Hirsh, economic education consultant and developmental economic education program coordinator, Richardson Independent School District.

†Greg Lavender and Cherie Henderson, students at Forest Meadow Junior High School, Dallas, Texas, were authors of the game and served as international trade commissioners when the activity was played.

The game was restricted to a two-day period since I felt that other teachers would more readily accept this for utilization in their own classes.

Work on the game was begun in November 1981, and the activity was played in class in May 1982. Between these two dates, however, the students and I had numerous meetings after school—some quite lengthy—but the success of the game seems to have been well worth the time and effort put into it. The simulation included a lot of “meat” yet its length made it suitable for inclusion in my course on American history. It provided an enjoyable, challenging, motivational activity and served to reinforce all the economic concepts we had covered during the year. The structure of the game allowed students to take the initiative and elaborate upon the original framework. Although we used the simulation as a culminating activity to reinforce the learning of concepts introduced during the year, it would also be quite effective an introductory activity for students in grades ten, eleven, or twelve, provided they had covered the key economic concepts in a previous course.

Goals

There were six major goals for this simulation. Upon completion of the game, students were to have:

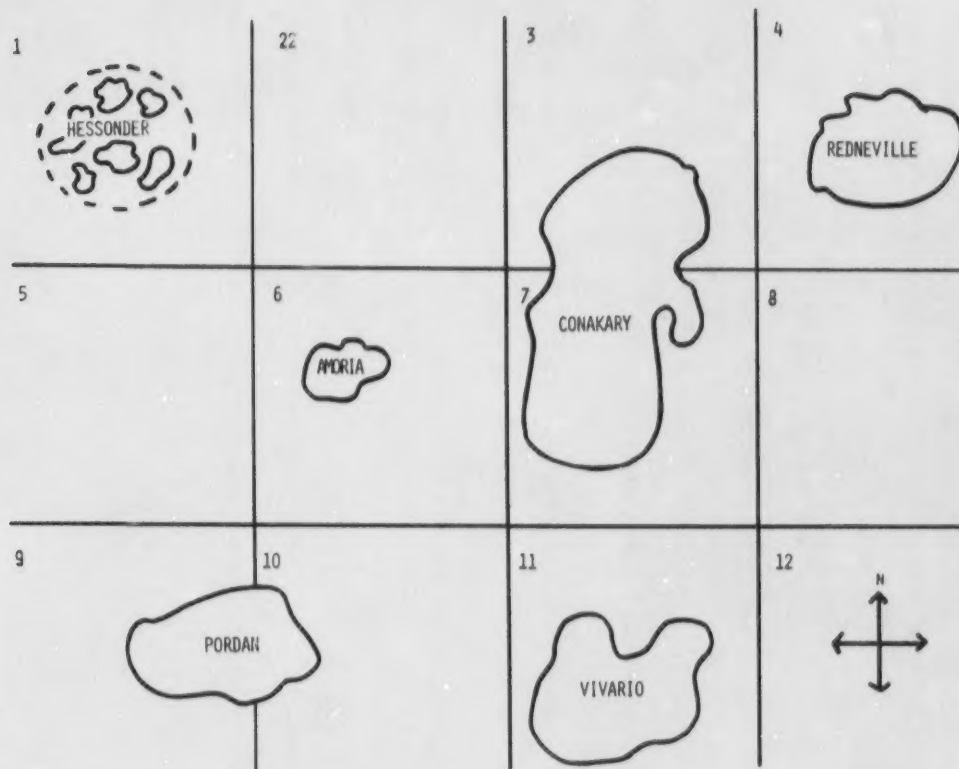
1. Demonstrated knowledge of economic concepts and generalizations found in the glossary of the unit;
2. Developed a greater understanding of the main economic problem of scarcity by trying to meet their own country's needs;
3. Realized the role of interdependence;
4. Recognized the intricacies of established economic policy (i.e., political, social, and economic considerations);
5. Been able to operate with circumstances created by natural forces and with political and economic changes that were beyond their control;
6. Formed parallels between actions and events that occurred in the game with those which occur in the real world.

Objectives

The simulation, named “TRADECO,” dealt with a typical world situation. Some countries were more prosperous than others, relative to nature and human resources. The objectives of the game were for each country (1) to meet its economic needs and (2) if possible, exceed them and achieve greater potential for economic growth.

Procedures

The class was divided into six groups, each representing one of the countries included in the simulation. Flags served to distinguish each group/country. A map was developed showing the location and land mass of each of the nations.



MAP FOR TRADECO GAME

65

Two students were selected as international trade commissioners whose duties were to check each transaction for approval/disapproval, to record accurately transactions that occurred during the game, and to ensure that the rules were followed by all of the countries.

The first activity of each group/country was to determine the type of economic system—market, command, or traditional—that existed. Positions such as secretary of transportation, secretary of energy, and so on, were assigned to members of the group once the economic system had been defined. Following this, students received a Student Information Sheet, a World Situation Sheet, and a map. After these had been reviewed and students had indicated their understanding of the nature and objectives of the game, each nation was then provided with a Confidential Sheet. This furnished specific information about each nation; i.e., its surpluses of deficiencies in six factors—textiles, the labor force, transportation, food, energy, and capital. The Confidential Sheet also included information about the social and political situation in each country. Groups were allotted five minutes to assess their situations, to arrive at goals, and to develop plans and strategies for achieving these goals.

The activity was organized into six rounds, each consisting of three parts:

1. Each nation had to decide which space it would move into for the following round (*see map*). Only one country could be in a square per round and a country was prohibited from remaining in the same square for two turns in a row. (The map was structured to restrict the trading in order to provide for several rounds and event changes.) When a nation had decided on its move, this was reported to the commissioners, who indicated on the board the selected square of each nation. Any nation requesting a previously taken space had to select another.
2. Event Cards (deleted in the first round)—Three event cards, drawn after the spaces had been claimed and before the beginning of negotiations, were read aloud and referred to as "News Updates." Adjustments were made to the appropriate records or transactions. The event cards ensured that all countries had an equal chance of being drawn and an equal chance of being "good" or "bad."
3. Trading Session—This was a three-minute interval during which the nations traded their commodities. As nations completed trade negotiations, they filled out a Trade Agreement form and submitted it to the commissioners for approval.

Initially, students knew only about the economic positions of their own countries. However, after Round One the commissioners posted trades on the chalkboard and the relative conditions of each nation became public knowledge.

The country which had most closely satisfied its needs and had accumulated the most surpluses allowing for greater economic growth was declared the winner. The determination was based on the record of transactions compiled by the international trade commissioners.

Follow-up Discussion Questions

Review is a crucial phase of simulation as a learning strategy. Included here are questions I used in conducting the class discussion the followed completion of the activity. Some of the questions are suitable for use as essay assignments to be completed several days after the game.

1. What type of economic system did each country select?
Did each maintain its system throughout the game (i.e., if market was chosen, did each member have a say in the activities or did one person end up making most of the decisions)?
Countries today have mixed economies. If your system became mixed, what elements were dominant and in what ways?
What advantages and disadvantages existed for each system as you experienced it?
2. What was the outcome of the game for each country?
Did some or all countries find it impossible to meet all their economic needs?
Did you find some countries willing to discuss a trade, but unwilling to finalize one?
What commodities were most difficult to acquire?
How did tariffs affect trade agreements?
Were economic priorities set in each country based on what was most needed or on what was easiest to obtain?
How do you think countries today establish priorities?
Did anyone feel that a country could function economically without trade with another country?
What is the role of specialization and interdependence in today's world?
What role did specialization and interdependence play in your game?
3. How did the event cards affect your country's position?
Give examples of events which occur in the world today that affect the economies of one or more countries.
4. What effect, if any, did the social or political positions of your country have on your economic decisions?
If it did not happen in your game, how might social and political conditions and traditions of a country have interfered with and/or aided trading and/or the economic positions of the countries?
How do such considerations affect countries of today and their economic policies? Give specific examples.
Do you think political, social, and traditional views of a country dictate economic policy more often than not?
5. What economic concepts would you determine were covered in the game?
What problems arose in your groups concerning (a) policy planning, (b) decision making, and (c) trade negotiations?
6. What new ideas were brought into the game by individual countries? If none were, what are some things that could have been done (i.e., council of

all free countries organized and trade agreements established; a common market established among all the nations; economic sanctions brought against one or more nations because of political or social practices)?

Evaluation

The real test of the success of the game was the students' response to the follow-up discussion questions I developed. Our class did extremely well in the discussion and appeared to have achieved the goals and objectives that had been established.

Although I limited the simulation to two class periods, the next time that I use it, I plan to select some of the follow-up discussion questions and assign them as essays to be written in our class or as homework following some class discussion. In my opinion this would be the most conclusive way of determining whether the students really understood the economic concepts covered, had gained any knowledge from participation in the simulation, and were able to apply their knowledge and understanding to contemporary world economic situations.

What Is Your Cobra E.Q.?

Deborah B. Anderson, Eloise L. Boyer, and Dennis W. Robldoux

Western Hills Junior High School, Cranston, Rhode Island

Background Information

Western Hills Junior High School is one of three junior highs serving Cranston, Rhode Island, a suburban community of Providence, the capital city. The school covers grades 7-9. Approximately a thousand students from middle- and upper-middle-class families attend.

Cranston is affiliated with the Joint Council on Economic Education's Developmental Economic Education Program (DEEP) and is serviced by the Rhode Island Council and Center for Economic Education at Rhode Island College. Because of its involvement with DEEP, two of the authors of this project were able to obtain the *Trade-offs* audiovisual series.* The economic

*Produced by the Joint Council on Economic Education, the Agency for Instructional Television, and the Canadian Foundation for Economic Education.

concepts emphasized in the series were incorporated into the eighth-grade curriculum, which covers American history from 1860 to the present.

Students attending Western Hills are grouped according to ability level. The students who participated in the development of this program were in the eighth grade and in the lowest ability levels.

Introduction

Our economic education project consisted of a teaching test that was videotaped and presented by sixty eighth-graders from three social studies classes to the rest of the student body. Three teachers participated in the project, two from the social studies department and one a media specialist.

The project focused on six basic economic concepts: scarcity and choice, opportunity cost, productive resources, productivity, supply and demand, and market clearing price. These concepts were taken from the *Trade-offs* series which had been presented to the sixty social studies students in their American history class. The program took approximately ten forty-minute class periods to develop, approximately nine hours of time for videotaping after school, and one school day to conduct the test for the entire student body.

The purposes of the project were twofold:

1. To serve as a culminating and reinforcement activity for the sixty students who had participated in the "Trade-offs" program, and
2. To create student awareness of important economic concepts.

When we introduced *Trade-offs* to our students, we found that only a few had ever been exposed to even one of the programs in the series. We soon found that our students became highly motivated about the program and its content; they indicated that the series created more interest for them in American history since they were able to apply the concepts they had learned to events in our history.

Culminating Activity

Because of the enthusiasm displayed by the students, we decided to develop a culminating activity that would incorporate most of the basic concepts the students had learned: to produce a television program which would show what the students had learned from the *Trade-offs* series, and, at the same time, expose other students in Western Hills to the importance of economics in everyday life.

Recent testing of seventh-grade students on a city-wide basis, using the Joint Council's *Basic Economics Test* (grades 4-6) revealed the need for economic education. Since we believed that most students seem to enjoy non-threatening survey tests, we decided to develop a "teaching test" as an effective vehicle for introducing key economic concepts to the total school population. In addition, we felt that such an activity would provide an excellent reinforcement strategy for the sixty students who would produce the program. With the

opportunities inherent in our closed-circuit television system, we capitalized upon its potential for permitting a large number of students to participate in the project.

Objectives

We developed two key objectives for the sixty students who were involved with constructing the economics quotient (E.Q.) program:

1. Through the writing and production of a videotaped program, the students will demonstrate their knowledge of six economic concepts;
2. Through a cooperative effort, the students will present their videotaped program to illustrate their understanding of the economic concepts they have learned.

For the students from the rest of the school who were to view and participate in the program, we stated the following objectives:

1. Students will answer questions demonstrating their knowledge of six economic concepts.
2. The students will explain each of the concepts after viewing the television program.
3. The students will apply each of the economic concepts.
4. The students will evaluate their performance on the E.Q. test and indicate their scores on a given scale.
5. After viewing the videotaped program, "What Is Your Cobra E.Q.?" the students will apply basic economic concepts to their personal decision making.

Procedures

The culminating activity for our project was the development of a teaching test to be administered to the entire student body of Western Hills Junior High School. Included in the test were the major concepts emphasized in the *Trade-offs* program: scarcity and choice, opportunity cost, productive resources, productivity, supply and demand, and market clearing price. The project was organized to be constructed by our sixty students for the purpose of developing awareness in other students of these concepts, but on a very basic level.

After the concepts had been identified, sixteen multiple-choice questions were formulated, using the *Basic Economic Test* as a resource. This particular test was used since it had previously been administered to seventh-graders and had revealed that there was a need for greater economic education.

We then wrote a script which focused on the multiple-choice questions. This included the questions, answers, explanations of the concepts, and a

student-centered application of the concepts. Two students served as narrators and they were assisted by a puppet who represented the school mascot and a cobra named K.A. Cobra. Three students, working as a team, were responsible for the puppet; two served as puppeteers, and one student as the voice of the puppet. The two narrators and the puppet asked the questions, gave the answers to each of the questions, and explained the economic concepts which were included in the sixteen questions. The other part of the program afforded an opportunity to apply the concepts to real-life situations. Several students played the part of a group serving on the student council of the school and presented a problem that was realistic—to raise money for a class picnic through the sale of handmade flowers.

In preparation for the videotaping, the students constructed scenery, props, and visual and cue cards. Student technicians were responsible for videotaping in the school's television studio. We were pleased that the audiovisual specialist in Western Hills became a part of our team and provided expertise.

To stimulate interest, the eighth-graders created posters which were exhibited around the school and wrote commercials which were broadcast over the radio station. Both aroused the curiosity of the student body without giving away what "Cobra E.Q." actually represented.

On the day of the school-wide test, which was conducted throughout the social studies department, our group prepared folders which contained instructions and printed answer sheets for distribution to the teachers. The test was administered via our closed-circuit television system, and the entire school responded to the questions as they were asked. The tests were scored by computer and an item analysis conducted through the services and cooperation of the Rhode Island Council on Economic Education.

Future Prospects

Our videotaped program "What Is Your Cobra E.Q.?" will be shown to grades five and six in several elementary schools next year in the hope that it will stimulate interest in economic education throughout the Cranston school system. We were pleased to find that other teachers in the three junior high schools will use the program to introduce basic economic concepts to incoming seventh-grade students.

Program Evaluation

The "Cobra E.Q." test was administered to 582 students, who scored an average of 9.3 questions correct out of the 16 in the test. The high group (scores of at least 12) included 206 students, and the low group (scores of 7 or less) consisted of 247 students. Almost half of the students in the low group could not define correctly scarcity, capital, entrepreneurial skills, productivity, and market demand. They defined the basic problem facing society as the

"high price of goods," capital as "money," and entrepreneurial skills as "the time and money needed to produce something."

The ninth-graders as a group achieved a higher mean score, 10.4, than the eighth grade's 9.4. Seventh-graders had a mean score of 8.2. The mean score achieved by students who had participated in the *Trade-offs* program was 11.8, or approximately 30 percent higher than the rest of the student body.

Sold to Dominic for 1 Troy and 3 (24) Fin

A Unit on Money

Sandra L. Williams

Washington Elementary School, Lafayette, Indiana

Introduction

I teach sixth grade in a school that is located in the low-income area of town. Most of the households have one parent and rely heavily on welfare and other government assistance. After enrolling in a two-week workshop in economic education, I realized how much the children I teach need to have a background in basic economics. With this thought, I decided to organize a money system in my classroom—an idea I had received from one of the workshop assistants. I modified the idea to meet the unique needs and interests of the students in my class.

Goals and Objectives

In organizing the workshop I considered the objectives listed here:

- To assist the students in demonstrating their decision-making skills by making decisions involving the buying and selling of items in a classroom activity, using fictitious money;
- To enable the students to show their ability in base-twelve arithmetic by using base twelve when depositing and exchanging money in the classroom bank;
- To have the students show whether they have learned that a decision is required at all times by picking the best buys from a newspaper, by comparing

prices at different stores, by deciding whether to do their jobs or assignments, and by deciding what to buy at an auction.

The following are my specific objectives for presenting economic education concepts:

- That the students would demonstrate their knowledge of terms in economics by being able to apply them to other activities — for example, by giving concrete examples of an opportunity cost;
- That the students would learn about decision making by making various choices: Whether to do their homework or work for income, or whether to buy an auctioned item or save their money;
- That the students would learn about scarcity, especially during the auction;
- That, with regard to supply and demand, the students would learn that if an auctioned item is popular and demand is high, the price will usually go up;
- That the students could compare their working or classroom money system with the United States monetary system;
- That the students would learn about opportunity costs and how they are experienced with decision making.

Organizational Procedures

This activity was intended to be used during the entire year. It required a considerable amount of preparation time and took place during each school day. At the beginning of the school year, I told the class that we were going to establish a money system and that they would be paid for doing homework, doing jobs, giving oral book reports, being elected classroom president, and so on. Students thought this excellent, but then I brought up the question of expenses. They would have to pay for late homework, messy desks, paper left on the floor, restroom passes, and other "demeanors." In addition, the students had to pay rent and utilities for using the classroom. They did not think this fair because they could not get a lot of money. At this point I introduced my first economics lesson, indicating that we would be making decisions and learning how to use money effectively.

Our money system was then introduced. Students were given two weeks' reprieve from paying for rent and utilities in order to allow them time to build up their incomes. As they earned money, they were given options as to whether to hold on to their money or put it in the class bank. I served as the banker and provided interest and security against loss. Since the bank paid daily interest, most of the students elected to keep their money in the bank. At the conclusion of the two-week period, students paid their expenses and the class conducted its first auction. I provided the items for the first auction, among which were pens, pencils, erasers, posters, small toys, and a bracelet. The students became very excited about the behavior of prices and, as a result, usually bid the entire amount they had available to spend. Successive bids jumped by tremendous amounts.

Auctions were held every two weeks and, following the third one, the students began to realize that they could spend only what they had available at a given time and therefore had to make choices. They also began to bring in their own items to sell and received the amount paid for each item, less a commission which went to the auctioneer (myself).

We also elected a president and vice-president every two weeks; they were paid a specific salary since they had such specific jobs to perform as picking employees for the various jobs, keeping track of "crimes" that were committed, and organizing class events.

As part of the project, students had the option of buying their own desks as well as buying others in the room and charging rent. We had established a set fee for the purchase of desks and determined a ceiling price for rent. The students had to go through a land-office bank to acquire a deed of sale of property; in this way I knew who owned the desks. It was rather interesting to observe property ownership changes as students needed money.

As the second semester started, the students were earning income and spending it with relative ease. At this time I introduced another incentive—money market certificates—which paid double the interest of regular savings accounts. Students were allowed to buy money market certificates once a week but had to keep their money in the bank for five weeks; they became very excited about how their money grew.

Adding another dimension to our project, several students took the initiative of starting their own companies. As a result, we had "desk washers" and "paper sellers" who charged fees for their services. The desk washers even issued a credit card which their customers could use.

Our Money System and Equivalents

The base-twelve money system I organized included *fins*, *troys*, *banas*, and *milas*, as follows:

- 12 (1) *fin* = 1 (12) *fin*
- 2 (6) *fin* = 1 (12) *fin*
- 6 (24) *fin* = 1 *troy*
- 12 (12) *fin* = 1 *troy*
- 24 (6) *fin* = 1 *troy*
- 12 *troy* = 1 *bana*
- 12 *bana* = 1 *mila*
- 144 *troy* = 1 *mila*

Income and Costs

Listed below are the income payments made to the students and the costs they were assessed (expenses):

Income

Homework completed on time

12 *fin* per assignment

Jobs each day	24 <i>fin</i> per job per day
Oral book report	24 <i>fin</i> per book
Buy a book (Arrow)	1 <i>troy</i> per book
Activities and bulletin boards	6 <i>fin</i> per activity
President	4 <i>troys</i> per week
Vice-president	1 <i>troy</i> per week
Regular savings interest	6 <i>fin</i> per <i>troy</i> per day
Money market certificates interest	12 <i>fin</i> per <i>troy</i> per day

Expenses

Chewing gum, or any food	24 <i>fin</i>
Talking in line	12 <i>fin</i>
Restroom pass	6 <i>fin</i>
Leaving paper or chair on floor	12 <i>fin</i>
Getting in other's desks	24 <i>fin</i> first time, then 1 <i>troy</i>
Late homework	6 <i>fin</i> per assignment
Rent on desk	1 <i>troy</i> per week
Utilities	24 <i>fin</i> per week
Buy a desk	1 <i>bana</i> each
Bank loan interest	12 <i>fin</i> per <i>troy</i> per day

Instructional Schedule

1. First day of introduction: statement about a future money system
2. Two weeks later, introduction of system:
 - a. Income
 - b. Expenses
 - c. Money
 - d. Property
 - e. Bank
3. Two weeks' free rent and utilities:
 - a. Allow income to be made
 - b. Allow students to feel comfortable with money
4. Rent, utilities, and auction:
 - a. Allow for putting money aside
 - b. Decisions in auction: items to buy, prices to bid, amount willing to spend
 - c. Opening of loan department
5. Second semester:
 - a. Money market
 - b. All property owned
 - c. Student control taking place

Weekly Schedule

1. *Monday*: No payments
2. *Tuesday*: Payment for Monday jobs, homework, and interest
3. *Wednesday*: Payment for Tuesday jobs, homework, and interest

4. *Thursday*: Payment for Wednesday jobs, homework, and interest
5. *Friday*: Payment for Thursday jobs, homework, and interest
6. *Friday Noon*:
 - a. Payment for Friday jobs, homework, and interest
 - b. Payment for expenses
 - c. Biweekly elections
 - d. Biweekly auctions
 - e. Opening of money markets

Summary Comments and Evaluation

This activity took considerable time and intense planning, but the results were exceptionally rewarding. Economic decision making became very realistic and challenging for the students because they were engaged in it during the entire school year. The two economic days of the week proved to be of such high interest that the students were greatly disappointed if something came up to change the schedule.

The whole unit was a success because the students accepted and enjoyed the class money system which had been developed. Parents frequently commented that their children were attempting to explain their money system, but that they could not understand it; it seemed too complicated. The students, however, could rattle off amounts and count money with ease. There was little doubt that the objectives I had established had been attained, but, more important, the students understood and learned because they had seen a system work.

GOOD IDEAS IN BRIEF: JUNIOR HIGH SCHOOL LEVEL

TINA BECKHAM, a teacher at *Daggert Middle School, Fort Worth, Texas*, created the Daggert Occupational Workshop for Deaf Youth (DOWDY) to teach language learning-disabled deaf youth economic concepts and skills through experience. Situations relating to the American economic system which would be encountered by vocational students were simulated in the classroom. The workshop that was organized included seven to ten deaf students between the ages of thirteen and sixteen. Most functioned on a very low level and read on a primary-grade level. The course was initiated with the students applying for a job in the workshop. Every job involved the production of a different craft that was sold in the school. The various jobs also related to different kinds of work situations and methods of pay. Since no money had been appropriated for the workshop, a field trip was taken to the Educational Employees Credit Union where the students secured a loan of two hundred dollars. As crafts were sold to the student body, monthly loan payments were paid. Students progressed considerably as they improved their

production rates and quality of work, earned pay increases, and developed the ability to maintain their own checking accounts. At the conclusion of the year, each student was allowed to spend the money earned in a self-selected activity.

BARBARA-ANN K. LUCAS, a seventh-grade social studies teacher in the *Fairfield Middle School, Richmond, Virginia*, organized a unit entitled, "Economics and the Civil War: A Unit for Seventh-Grade American History Students," to infuse basic economic concepts and to illustrate these in the materials for the unit. The central theme of the project was that the Civil War was essentially an economic conflict and that the economic differences between the North and South were the real causes of the war rather than the single issue of slavery. In approaching the presentation of the unit, students first read the account of the Civil War from their American history textbooks. This reading was followed by a two-week period during which key economic concepts were introduced and applied to the Civil War, which proved to be helpful to the students; they saw that economics had played a significant role in American history, especially in the Civil War. As part of the introduction of economic concepts, the film series, *Trade-offs*, was used, along with several other good audiovisual materials. Discussion of the economic-differences between the North and South brought understanding about inflation, taxes, money, and the role of economics in the war. The Joint Council instructional materials kit, "Teaching Economics in American History," also proved to be a very valuable resource for the students.

PAUL H. PANGRACE, social studies department chairman and classroom teacher at the *Cleveland School of Science, Cleveland, Ohio*, developed a unit which enabled students to study the various factors of the energy situation in terms of basic economic principles. The students became aware of the need to conserve and utilize a wide variety of energy sources for the benefit of all. Entitled "The Economics of Energy," the six-week unit was a portion of the required ninth-grade social studies course, history and philosophy of science. The unit's purpose was met by engaging the students, both individually and in groups, in a series of activities which enabled them to analyze the energy problem past, present, and future. Activities included conducting a home energy survey, developing a plan to improve their personal energy usage, collecting energy-related news articles, determining alternatives for petroleum-based products, preparing editorials on "What Is Right About the Energy Crisis," and a group project exploring a particular energy source which was reported to the class. The concluding activity enabled students, working in a group, to develop a public relations campaign to promote the use of a particular energy source. They were required to prepare a campaign that included radio advertisements and magazine and print material, as well as bumper stickers to encourage broad use of their energy source. The key factor that made this project successful was full student involvement and participation in all portions of the unit. As a result, the class improved its basic

understanding of economics and the application of economics to the energy issue. The evidence was improved post-test scores over those of the pre-test.

TERESA HARVEY, a home economics teacher at *Perry Middle School, Hollywood, Florida*, designed a unit entitled, "A Consumer Bulletin: Scenes for Teens," to teach her students their roles, rights, and responsibilities in the marketplace. The unit was initiated by a requirement that students compile consumer information and organize it into a consumer bulletin to be published and distributed to the student body. The students researched consumer and other magazines. They also became more alert to information gained from comparative shopping, to the types of services offered by various stores, and to the presence of misleading and false advertising. Following this research, students wrote articles based upon their findings. Several of the students typed the articles and compiled these into a bulletin, which was duplicated and distributed throughout the school. The publication consisted of consumer tips, guidelines, warnings, and some commonsense advice to the student consumers. Sample articles included, "Teens and Jeans," "The Video Bug," "Records and You," and "Caring for Hair." Other articles concerned recipes and shoplifting, and there was an editorial on exchanges and refunds. The bulletins were issued three times during the school year and averaged six pages in length. Publication of the bulletin offered students an opportunity to become involved in an interesting and challenging activity which also helped them to become more educated and conscientious consumers. Of equal significance, the students achieved a sense of accomplishment and success as they observed their peers enjoying the bulletin.

GRACE KELLY, an eighth-grade teacher in *St. Mark's School, located in Peoria, Illinois*, developed the unit "Saint Mark-Onomics," which allowed her students to explore the American economic system through the organization and establishment of small business ventures in order that they might experience the benefits and demands of such an endeavor. Students were given one dollar each and told that they were a part of a business organization. They were expected to use their "talents" to make money for their corporation, with the final goal of earning a profit to be used to finance their class trip. Students were free to form small companies with their classmates or enter the business world independently. The primary objective of the unit was to use economics as a base to incorporate other instructional areas during the four weeks allotted the project. In art class, students designed coins, stock certificates, and various advertising posters. In English class, they used the story form of a parable, writing tales about familiar objects which concluded with surprise endings, requiring the reader to rethink old ideas. In language class, the terminology used in business and economics was emphasized, and in mathematics class, students turned in financial statements which covered income and expenditures. Additional activities were developed in the unit to bring in religion and science. The "bottom line" for the unit resulted in more than two hundred dollars in net in-

come over the original investment of twenty-eight dollars. The students voted to use the money to pay the way for two students, one from Vietnam and the other from Poland, to go on the field trip. Money were also provided to buy a tape cassette player for the student from Poland, to enable him to study the English language with his family.

SHARON B. KONET, a seventh-grade teacher at the *Geneva Secondary Complex, Geneva, Ohio*, developed a four-week unit called "Alternative Economics Systems: A Unit for Seventh-Grade Geography." The unit was initially presented during the first semester, to one seventh-grade class consisting of thirty-five students. Because of its success, however, it was taught again during the second semester to four more seventh-grade geography classes. The unit was divided into three portions devoted to the three basic types of economic systems: traditional, command, and market. Each type was analyzed through reading, discussion, research, the use of audiovisual aids, and by making comparisons and contrasts. Games and simulations included a free-market fair, conducting book cover production by command, and an apple-eating activity to illustrate the workings of a traditional economy. The goal of the unit was to provide opportunities for the students to better understand the market system in the hope that they would conclude that it offered the greatest freedom and advantages to any society. The unit was organized with instructional objectives and related activities. At its completion, students were able to demonstrate a number of skills, attitudes, and interests, including vocabulary development, understanding of the relationship between people and the environment in terms of labor and land resources, understanding of the differences in systems and how decisions are made relative to the use of scarce resources, understanding of the factors of production and how these are organized in the three economic systems, and a realization that individual freedom is greatest under a market-oriented system. A variety of activities were utilized, among which were talks by traveled faculty members, and case studies of selected economies, and a free-market fair.

BONITA FRANKLIN, a seventh-grade language arts teacher in the *Mt. Washington Middle School, Mt. Washington, Kentucky*, developed an economics unit entitled, "General Practice: An 'Ornamental' Approach to Economics," which focused on organizing an interesting, practical experience in the classroom. The goals of the unit included broadening of the students' economic vocabulary, organization and setting up of a business, enhancement of the students' understanding of their roles as consumers and producers, and understanding of how economic choices affect themselves and others. The unit was organized into three parts. The first part, presented during the first semester, focused on the teaching of basic economic concepts, such as the stages of economic development, scarcity, opportunity costs, supply and demand, the market, the consumer, the producer. The backbone of this segment of the program was the television series, *Trade-offs*, along with several

filmstrips and related materials. The second phase involved the setting up and organizing of a classroom corporation. The enterprise revolved around school spirit and used the school mascot as the design to be painted on Christmas ornaments which would be sold to the student body. As a result of this activity, the students realistically experienced production, advertising, and consumer and business practices. For the final part of the unit, students researched the effects of crime and vandalism on business. Specifically, studies were conducted on the costs of crime and vandalism and how these affected the producer and the consumer. The unit was concluded with a study of insurance, what it is, and why it is important.

GAIL TAMARIBUCHI, a seventh-grade social studies teacher at *Southwest King Intermediate School* in *Kanehe, Hawaii*, developed a unit called "Should Teenagers have a Minimum Wage Differential?" for twenty-two gifted and talented students. The unit was part of an effort to include basic economics in the curriculum. Prior to its presentation, students had participated in a critical analysis thinking skills procedure unit, and it was felt that a unit dealing with current economic issues would incorporate their interests and develop their critical thinking skills. The primary goal of the economic unit was to help students understand the problems and effects of subminimal wage rates for teenagers and to develop the ability of students to make rational decisions. The unit was initiated by seven readings which presented the pros and cons of minimum wage rates. The students then followed a series of prescribed steps and worksheets designed to encourage them to make rational decisions based on factual information. The ten steps included researching and defining the issue, determining fact from value judgment, assessing the relevance of information, organizing and prioritizing information, and assessing the validity of sources and the confidence level of facts. The concluding activity, "empathy experience," allowed the students to realize how their decisions might affect others. The procedure proved to be a highly effective strategy for teaching any controversial topic or issue.

An Introduction to Capitalism

Carl Jette

Nicolet High School, Glendale, Wisconsin

"In the first place, you should be well aware that it is rarely up to you to suggest to him what he ought to learn. It is up to him to desire it, to seek it, to find it. It is up to you to put it within his reach, skillfully to give birth to this desire and to furnish him with the means of satisfying it."

Emile

Jean Jacques Rousseau

"Our pupil should not so much say his lesson as perform it. He should repeat it in his action."

"On the Education of Children"

Michel de Montaigne

Introduction

As an aspiring musician, I now appreciate the importance that nascent technique plays in the development of ultimate virtuosity. Excellence in music requires a dedicated and talented individual who eventually reaches a particular level of development through countless hours of painstaking labor.

As an educator, I have learned to apply the lessons embodied in the joy of making music to the learning process itself; this abstract will attempt to illustrate what can be realized by using a creative learning approach.

I agree with Rousseau—successful learning requires well-prepared minds that are open, intelligent, adventurous and have an irrepressible passion for learning. Most important, it is essential that the students nurture a desire for learning through the study of ideas that are contained in personal experiences which are both attainable and satisfying.

Overview

This abstract outlines two student projects that I utilized in introducing and completing a semester's work in secondary economics. I wanted my

students' first exposure to economics to be a memorable and rewarding experience. I consequently chose the study of what it means to be a capitalist as the departure point. My primary purpose was to refrain from indoctrinating; instead, I wanted my students to struggle with the question from a number of different viewpoints. I chose Milton Friedman and George Gilder to defend the capitalists; E. F. Schumacher and Adam Smith (surprised?) became the antagonists. The students were asked to read and study a collection of writings, develop their views, and defend these in class. Eventually, the students were required to write their own imaginary conversations. I did not, however, announce this requirement at the beginning of the semester; I wanted full concentration on the ideas.

The semester's concluding activity required small groups of students to demonstrate their mastery of basic economic concepts through the genre of theatre. A number of the presentations were entertaining and provocative. The winning performance in this entry was a game entitled "Economic Prosperity." Using the Milton Bradley game of "Life" as a model, my students were able to enliven the world of economics.

Goals and Objectives

- To introduce the study of economics in an interesting and provocative manner;
- To raise students' awareness about the political ramifications of economic decision making; to realize that sound economics is a politicians' nightmare;
- To uncover the interdisciplinary aspects of the study of economics;
- To provide students with an opportunity to become *involved* in the learning process; to realize that learning is an active rather than a passive activity;
- To outline and delineate four major views pertaining to capitalism: those of George Gilder—capitalism as a form of giving, the highest form of altruism; those of Milton Friedman—the belief in economic prosperity emanating from a system based on economic and political freedom; those of Adam Smith—a belief in laissez faire capitalism together with the emergence of moral sympathy as a predominant sentiment; and those of E. F. Schumacher—the metaphysical dangers present in a society based on the accumulation of wealth;
- To allow students to evaluate economic decisions critically in terms of basic trade-offs between employment, inflation, and budgetary constraints;
- To provide students with a historical perspective as to our economic problems and their solutions.

Organization and Procedure

During the first nine-week portion of the semester, I introduced the following readings to my students:

Milton Friedman: *Free to Choose*
George Gilder: *Wealth and Poverty*

E. F. Schumacher: *Small Is Beautiful*

Adam Smith: *The Wealth of Nations* and *The Theory of Moral Sentiments*

The students were required to read a certain portion of the corpus each evening with the expressed intent of discussing it the next day. Our discussion was focused on challenging the basic presuppositions of each author; I did not want my students to swallow anything whole. I incorporated the basic tools that are essential to the dialectic—comprehension, analysis, synthesis, and evaluation. My philosophical background was particularly helpful; I encouraged my students to question all “truths” (Descartes would have been proud!). As you might imagine, the tempestuous conversations proved exhilarating. The students were beginning to question the nature of their own economic system. Moreover, I deliberately neglected to include any information concerning my means of evaluation; I did not want to distract their attention from the issues. I wanted the scope and vitality of the daily discussion to be paramount with no distractions from evaluative instruments. When inquiries arose concerning grades, I feigned ignorance and put forward my balloon theory—each student would receive a balloon; those whose balloons reached Lake Michigan would receive the highest grades; losers could blame the weather. Finally, at the conclusion of the seventh week, the students were given the following statement:

Imagine that George Gilder, Adam Smith, E. F. Schumacher and Milton Friedman have come together. You choose the setting: it can be at Rosie's Chicken Palace where our heroes are busily munching the golden brown delicacies or enjoying the treat of a jumbo beef sandwich; you can place our visitors on Buffalo Island where they are frantically looking for live inhabitants. (I don't care—be creative!) I am interested, however, in reading a transcript of their imagined conversation, the nature and substance of which I will leave to your inventiveness. I will evaluate your script based on the following criteria: (1) ability to pick out and integrate major concepts; (2) depth of intensity of discussion; (3) resourcefulness; (4) creativity. Give me quality work.

I speculated that this sort of question would require my students to review the entire unit. I toyed with the notion of outlining the basic ideas I wanted discussed (a common practice in university essays), but I settled upon the open format because I was curious to see what they would do. I evaluated the students' work on the quality of their *questions* and *answers*. I saw this as a unique opportunity for students to be involved in a creative process.

The Making of Economic Prosperity

Because the activity originated with my students, I have taken the liberty of including an excerpt from the student position paper that outlines the philosophy behind the game.

Economic Prosperity

"Economic Prosperity" is a project that we undertook as a final project for our economics class. Each group was given the freedom to choose one economic topic or idea, the nature of which was left to our own discretion.

The idea of creating a gameboard was hit upon by chance, but as our group tossed the idea around, it became more and more interesting and feasible.

If we were to make a gameboard, we knew we would have to involve players making decisions in order to reach a certain goal—economic prosperity. The most suitable response to this challenge, in terms of economics, was to have each player be the president of the United States. The president obviously makes a myriad of decisions during his term of office; therefore, presidential decisions, economic and otherwise, became the content of our game. Finally, the goal of the game would be to keep the country economically healthy.

This was the basic outline of our project. In creating the details, the emphasis was placed on realism and accuracy. Since policy decision making today is extremely complicated, we did not want our game to follow simple cause-and-effect patterns. We first decided on the manner in which one would win the game. Many economic factors are part of our nation's total economic picture, so we proceeded to list these various factors. We reduced the list to four major concerns; the budget, interest rates, inflation, and employment. These seemed to cover the basic factors. We also realized that these four topics affected each other, yet each seemed to hold its unique importance. Emphasis in class readings on these subjects helped us make the decision.

Now, how to use these factors. We decided that each decision made during the play of the game would affect one or more of these factors. If some positive outcome was the result of a player's decision, e.g., the creation of new businesses which serves to increase employment, then the player would gain a point or two for this. The number of points a player had in each case—whether positive or negative—would reflect on how well or poorly each was doing in a particular topic or factor. Therefore, each player had four economic indicators. (The weakest part of our game was that we were forced to add a miscellaneous fifth category, since some decisions defy economic categorization).

Using this system as a basis for scoring, the rest of our game consisted of a myriad of creative ideas.

The gameboard was shaped as a dollar sign (with one line through the center).^{*} This created two paths to the finish line—economic prosperity. The longer path followed the curve of the dollar sign, while the shorter followed the slash down the middle. The shorter path (supply side?) comprised more hazardous events; the second and longer route tended to be more gradual. The first player to pass a space near the end of the game received extra points in three categories. The extra points may or may not have made the riskier path worthwhile. A player might take the shorter path and still not reach the bonus path

^{*}Original entry included a copy of the gameboard.

first. These two possibilities represented a presidential dilemma; a risky economic plan might be introduced, the nation may suffer for it, and it may not have been worth it. In such a case, the economic plan failed and the bonus never reached.

The gameboard attempted to resemble an average presidential term in office. It included selecting an initial budget, an inaugural address (real speeches), a television appearance, and congressional elections. All these factors affected a player's economic indicators.

The game was structured so that events beyond a president's control occurred. Among these were natural disasters, Supreme Court rulings, loan defaults, and technological innovations.

Finally, and most important, were the hard decision-making events. One-third of the board consisted of *Crisis* spaces (the riskier path had more). We included approximately twenty different *Crisis* situations. Each one presented a major problem and forced a player to select one of two to three options. Some examples were slumping industries, social security, oil prices, housing, and turmoil at home and abroad. There were no "right" decisions; each had its own consequences, and a player took a risk on each decision. We used the roll of a die to determine the odds and consequences for each outcome. Sometimes, a *Crisis* situation presented a "no-win" situation.

A very special and enjoyable part of the game was the use of popularity polls, or public opinion surveys. We believe that the public's perception of the president, government, and economic conditions actually affect governmental policy and economic decisions. Our original idea was to include a public approval poll with every decision's outcome. But since our project was a class presentation, we decided to have the class vote on each outcome and decision (it worked very well). The popularity percentage was important in the game because on certain board spaces, points were gained or lost according to the percentage.

Finally, the end of the contest presented a big decision: what to do about nuclear arms. Although it is not solely an economic problem, we felt that it is one of our country's most important concerns. A player could decide to do nothing or attempt to gain a number of points by reducing the pace of the escalating arms race (actually, it is not an obvious choice—players chose opposite choices during the presentation).

At the end of the game, each player totaled the points won in the five categories. The winner in our presentation ended up with zero points—it happened to be our economics teacher.

Related Student Activities

The following television programs were used for the capitalism unit:

1. "Enterprise": Harvard Business School
2. "Creativity": Bill Moyers; Federal Express
3. "Just Plain Folks": The Hunt Brothers—NBC White Paper
4. "Free to Choose": A Personal Statement by Milton and Rose Friedman
5. "Nova": Henry Ford

Some additional readings were also used.

Summary Comment

Student comments at the end of the course reinforced my belief that the effort was of some benefit to them. With respect to my goal of questioning and evaluating, I received a number of highly favorable responses, such as, "I considered myself so much more enriched, not because I actually learned everything there is to know about economics, but because I have understood the material we covered"; "I still have a million and one questions to ask"; and "After studying economics for the last five months, I realized it is linked to just about every kind of field of study."

I realized how successful the course had been after reviewing a checklist of the goals for the course:

- To introduce the subject of economics in an interesting manner and heighten the students' awareness of its importance and viability;
- To afford students an opportunity to enquire into the nature of economic study and the role capitalism has to play;
- To uncover the interdisciplinary aspects of economic study;
- To provide students with a historical perspective of economic problems and solutions; and
- To allow students to critically evaluate economic decisions.

Sherco 3: Should It Be?

William D. Mittlefehldt

Anoka Senior High School, Anoka, Minnesota

Introduction

This unit was developed to involve students in decision making. Using a real-world situation, I designed it to emphasize the role which costs play in economic decisions and how relative prices are changing economic behavior. The core activity is a role-playing simulation in which the students attempt to influence a hearing examiner who has been charged with recommending a course of action on the building of the largest coal-fired power plant in Minnesota. This issue is a microcosm of the types of controversies which will emerge throughout the nation as fossil fuels become more scarce and costly.

On a symbolic level, this unit represents a local variation of a national debate: What should our energy policies be in the 1980s? Both education and economic decision making will be major factors in shaping that historic debate.

Overview

This simulation was developed for a twelfth-grade class in social problems. It could, however, be used in either the eleventh or twelfth grades in such courses as economics, sociology, political science, American problems, or futuristics. The simulation utilizes nineteen different roles to dramatize the complexity of economic decision making during an era of resource transition. The unit required six days of class time, two days for prepping, three to play the simulation, and one for review; however, with the inclusion of the suggested activities, it could be expanded to a two-week project. The section on "Related Student Activities" provides the teacher with additional opportunities for the incorporation of more roles.

Before I began the simulation, I made sure that my students understood a number of key economic concepts. It was important that they realize that this was more than an exercise in economic decision making. Vocabulary sheets, illustrations, and discussions were used to prepare the students cognitively for participation. After establishing a conceptual base, I briefly described the state of Minnesota's economic situation and its energy resource dependence. The students were then given the economic particulars and introduced to their roles. After one round of lobbying for their resolution of the economic problem, I then gave a more in-depth variety of data related to the building of Sherco 3; this provided more grist for the cognitive and affective mill. Following this, the students played the second round as they utilized the new information and data they had received. In this process, they developed a matrix analysis of the trade-offs involved in the controversy. Finally, they wrote out their own resolutions of the economic decision. In the concluding discussion, I re-emphasized the concepts of scarcity, the law of supply and demand, and the opportunity cost principle. Students were encouraged to generalize from this specific case to similar issues found in the news.

Rationale for the Simulation

The lesson was designed to introduce students to the problem of economic decision making which is representative of a mixed market system. The Minnesota Energy Policy Act requires that there be a public hearing to determine if the state's largest utility, Northern States Power (NSP), will have enough demand to justify the construction of a large coal-fired power plant. I used this real-life situation as a technique for stimulating student interest, involvement, and participation in a role-playing activity. The hearing format of the simulation was used to illustrate how the market mechanism may be altered by the public sector.

Objectives

At the conclusion of the simulation, the students should be able to see and feel economic situations in a new way. Specifically, I would like them to expand their awareness and deepen their sense for the economic trade-offs which accompany economic change.

To increase their cognitive awareness, I expected the students to describe the meaning of scarcity, the law of supply and demand, and opportunity costs, and be able to apply these concepts to the Sherco 3 controversy. Additionally, I wanted my students to be able to evaluate the positive and negative trade-offs which would develop out of each of the possible decisions in the case, and be able to use this set of concepts in regard to other, similar events which were occurring locally and nationally.

The central affective objective of this simulation was to illustrate the current drama in energy economics. I wanted the students to feel that the simulation reflected real-life dramas which would have a tangible impact on their lifestyles. My primary goal throughout was to convey to the students that the decision and its opportunity costs would directly affect their lives.

Organization and Procedures

On the first day, I presented an overview of the whole simulation. This was done visually, using a flow chart which I had developed. Students welcomed the idea of a flow chart since they like to know where they are and will be. I also explained what I hoped they would gain from the activity.

Next, I briefly described the economics of Minnesota's energy dependence. This was oversimplified but was generally effective for setting the dramatic tone of the simulation. Most students seemed to understand that capital exported to import energy was capital that did not create jobs for people in Minnesota. An effort was made to parallel Minnesota's energy situation with that of the nation as a whole. Next we went over the vocabulary used in the simulation. The students were given sheets bearing the terms and their definitions. After some drill, an effort was made to use each of the terms in a context which was familiar to the students' age group. Initially, the students worked together in small groups to discuss and write about the central problem, using the new vocabulary.

I started the second day by reviewing the overview, the vocabulary, and examples which had been shared during the previous class period. After answering questions and clarifying the problem with more examples, I explained the rules of the simulation and emphasized their importance. Role descriptions were then distributed, with additional emphasis on strict adherence and secrecy. While the students studied their roles, I circulated the room to answer particularities. After the students had reviewed their roles, students were told about the technical aspects of this social problem. Subsequently, the class reviewed relevant background information on energy, economics, and the environment.

At the beginning of the third day, we reviewed the rules and the students re-examined their roles. The hearing examiner, a group leader in the class, took the reins, explaining the simulation's format. After answering questions, the examiner then presided over the first round of the simulation, at the end of which students worked in small groups to complete their second task.

By the beginning of the fourth day, I had read the task sheets to sense how well the students were relating to their roles and grasping the drama in the simulation. Problems in the mechanics of the group's interaction were clarified. The thrust of the task sheets was shared, highlighting the drama contained within the dynamic tensions of the various perspectives. To resolve some of the tensions, I emphasized the need for more economic data. Time was spent examining data pertaining to resource economics, environmental costs, and employment projections. Students took notes which supported the arguments of their roles, completing their third task sheet.

The fifth day was convened by the hearing examiner with the teacher keeping a "low profile." The hearing examiner, who had been previously briefed on the problem areas from round 1, explained the problems from the first round and described the procedure for round 2. Students asked the examiner questions to clarify other problems. Then the examiner presided over the final presentations and rebuttal for round 2. While this was done strict silence was invoked and students worked *individually* on the fourth task sheet. This ended the playing of the simulation.

The sixth day was devoted to reviewing the results. After reading the most recent group of task sheets, I summarized the outcome by presenting a tabulation of the recommendations made to the examiner. This led to a large group discussion of the opportunity costs associated with each possible resolution of the Sherco 3 situation. Students were then asked to generalize the dynamics of the simulation to other local and national situations. I concluded the simulation by re-emphasizing that this decision-making topic was paradigm of the energy economics affecting the nation as a whole.

Related Student Activities

Listed are several of the eleven activities which I had developed.

- Discuss and explain the material in *Energy Review*, Volume 3, Number 1. It contains projections for Minnesota's supply and demand for energy: Draft 1980 Energy Policy and Conservation Report. It can be obtained from the Department of Energy Planning and Development.
- For teachers who can bring an Apple II computer into the classroom, there is a computer simulation, *You Are the Banker*, which fits well before or after "Sherco 3: Should It Be"? Through the computerized (diskette) simulation of banking, students learn how banks make economic decisions when granting or denying loans. After *You Are the Banker*, the students could discuss whether financing Sherco 3 would be a good risk for a banker. Materials are available through the Center for Economic Education.

- Students could call various stockbrokers and ask what their analysis of NSP's standing is an investment. They should ask for the broker's opinion on the Sherco 3 controversy. The class can then discuss the differences or similarities among responses.
- Students should read about the problems of regulating the utility companies in the Progressive era of U.S. history, then compare their findings to the present: Are we better off now than we were then? Why are utilities a good example of how the government affects the market?
- Have the students try to cut their family's use of electric power by one percent for one week. Then discuss how easy or hard it was, and how it bears on Sherco 3.
- Examine different estimates for world oil reserves and discuss the impact of depletion on prices and on the flow of energy dollars out of Minnesota.
- Have students investigate and report on an alternative energy resource in Minnesota. How feasible is it? How reliable and how costly is it?

Evaluation

To evaluate the attainment of my objectives, I gave a three-part test. The first part was an objective test on vocabulary, economic data, and student awareness of trade-offs. The second part of the instrument was an essay. Students were given a choice of essay questions focusing on their ability to analyze, evaluate, and generalize from their new understanding of energy economics. The final section of the test was creative—for the right lobe of the brain. Students were asked graphically, figuratively, or symbolically to illustrate themselves affecting or being affected by the energy economics in the 1980s. Cartoons, diagrams, poems, and stories were acceptable for this section.

Entrepreneurs: The Great American Dream

Diane Peters

Central High School, Little Rock, Arkansas

Overview

They create new business, they create new jobs; they symbolize the Horatio Alger dream of rags to riches, and they are readily available for classroom visits. Entrepreneurs are a natural for an economics unit.

This unit was designed to capitalize on the excitement of the great American dream of starting a new business and was divided into two components; first, my class created their own version of the dream, a fellow named Eddie Enterpriser, who wanted to start a business in Arkansas. As we followed Eddie's progress, appropriate economic terms and concepts were introduced, and these were reinforced by student projects, a lecture from a college professor, news articles, a film, and weekly tests. Students also wrote and visited state and federal agencies to find information helpful in starting a new business. This served to generate a great deal of student interest.

In the second part of the unit, several speakers were invited to visit the classroom for a more focused study of entrepreneurship. They included successful and unsuccessful entrepreneurs, an inventor, and a manager of a rapidly expanding and highly successful Arkansas-based firm. From the speakers and from their research in periodicals, students learned that entrepreneurs are vital in establishing new jobs. Since jobs were high on their list of priorities, students decided to write letters urging government officials to support fiscal and monetary policies helpful to new business. Our class also decided to share what they had learned by producing a slide show which was donated to the media center.

Background

This unit was designed to integrate economics into a high school American government class. This course is an elective in our school, which enrolls approximately 1,900 racially mixed students. I have two senior government classes consisting of average to above-average students, from every economic stratum in Little Rock. In addition, my classes possess an international flavor because of student exchange programs.

We had completed studying the structure of both federal and state governments, and, in addition to providing a good background in economics, I wanted to use the unit to give students a first-hand experience in dealing with government agencies and elected officials. The three- to four-week unit was divided into two parts. The first part was a concentrated survey of economic terms and concepts using the story of an imaginary entrepreneur as a point of departure. The second section narrowed the focus to entrepreneurs only and featured classroom visits by local businessmen.

Goals

The primary goals I had listed for the unit were that:

1. Students would gain a broad understanding of basic economic terms and concepts as measured by teacher-made tests and the *Test of Economic Literacy*.
2. Students would develop a continuing interest in economics as measured by discussions, transference into other fields such as news articles, and evaluation forms.

3. Students would gain confidence in contacting government agencies through letters and field trips and thus gain skill in letter writing and in finding out the types of information various government agencies have.
4. As students developed economic opinions and ideas, they would begin to participate in the democratic process by writing letters to elected officials.
5. Students would appreciate our market economy and the role of the entrepreneur.
6. Student performance can be measured by gauging their skills in writing letters, classroom discussions, and through the use of evaluation forms.

Contents

Part I of the unit was designed to introduce the idea of entrepreneurship to my students. As they entered the classroom, students were greeted by displays and a bulletin board featuring different entrepreneurs. We discussed these individuals—some of whom were local people the students knew—and followed this discussion with a definition of the term “entrepreneur”. As our introduction continued, many students pointed out that these risk takers create new jobs, new products, and new industries.

After listening to a presentation about the market system and the importance of entrepreneurship given by an economics professor from our local university, students watched a delightful film called *Chickenomics* (Cinema Associates Inc.), on the characteristics of the market system. We discussed the hero of the film, the San Diego Chicken, the mascot for the professional baseball team in this city. The film showed how the chicken had found a unique opportunity to go into business for itself.

Following a question that I had asked relating to the kinds of business the students would want to start, we created our own business tycoon, Eddie Enterpriser, and, as we developed the story of Eddie, I introduced appropriate economic terminology. As it became feasible, students contacted government agencies to get information to assist Eddie make his decisions and also to clarify our own understanding.

The Department of Energy, for example, could provide information on the future projected demand for gasoline. When the agencies were state offices, such as the Arkansas Industrial Development Commission, students took mini-field trips in small groups and then shared their findings with the class. Since our local branch of the Small Business Administration explained that it had no more money to lend and could only insure bank loans, we also visited a bank. The story of Eddie, the terms discussed, and the agencies contacted are shown in Table I.

We were fortunate to have very good speakers visit our class for an in-depth look at entrepreneurs. My husband described his banking experiences and gave a good review of Federal Reserve policies and the interest rate. A successful insurance executive talked of starting his own business and explained the basic principles of risk-sharing in insurance. Students were particularly in-

TABLE 1

Eddie's Story	Terms and Concepts	Agency to Contact
1. Eddie develops a gasoline substitute.	Scarcity, allocation, types of economic system	None
2. He wants to know about competition.	Imports, tariffs, balance of trade, interdependence	Department of Energy
3. He wants to know about demand.	Supply and demand—elastic and inelastic; circular flow	Dept. of Transportation, Dept. of Energy
4. He wants a cheap crop to convert to gasoline.	Factors of production, opportunity cost	Dept. of Agriculture
5. He wants to protect his invention.	Profit motive, self-interest, risk, patent	U.S. Patent Office
6. He is tempted to put his money in Treasury notes.	Deficit spending, treasury notes, saving bonds	Dept. of Treasury, Office of Management and Budget
7. He wants to know government policies.	Kinds of taxes; fiscal policy	Small Business Administration
8. Where should he locate? What would it cost to build?	Capital equipment, profit margin	Arkansas Industrial Development Commission
9. Eddie needs to borrow money.	Money as a medium of exchange, checkbook, reserves, Federal Reserve monetary policy	Worthen Bank
10. He wants to incorporate.	Kinds of business organization liability	Secretary of State (Arkansas)
11. He needs employees.	Collective bargaining, division of labor, productivity, open shop, closed shop	Employment Security Division
12. Eddie starts to build. Prices have gone up.	Inflation, business cycle	None

terested in a local inventor who had started a consulting firm. Because his expertise was rare and much in demand, students later speculated that he commanded a large income. One of our visitors represented a real Arkansas success story. He was a manager for a discount chain called Wal Mart which

began nineteen years ago in Arkansas with one store. It now has 491 stores in 18 states and employs 45,000 people, and students were impressed by the strategy Wal Mart has employed.

These speakers generated a great deal of interest and students became quite involved in the problems of their businesses. They learned about the burden of high interest rates and of the risk that is always present in borrowing and lending. They also learned of the possibilities for expansion and of the rate at which new businesses can generate jobs. Students learned that close to 80 percent of new jobs are created by businesses less than five years old, and that about 80 percent of all jobs are created by small business (those with fewer than 100 employees). This made a deep impression on high school seniors concerned about the unemployment rate, and headlines announcing that unemployment had risen to 9.4 percent that week heightened their concern.

When I suggested they write about this concern to their elected officials, they were enthusiastic, and we began to consider solutions for unemployment. This occasion proved an excellent time to put into practice the steps of economic decision making and, as we talked of alternate solutions, various trade-offs were discussed. Most students quickly disregarded direct government subsidies for jobs because of the potential for higher deficits leading to inflation, and a majority felt that encouraging small business should be the paramount consideration. Some of their ideas mirrored those of prominent economists; stricter fiscal policy aimed at lowering interest rates was a favorite suggestion, as was a tax advantage for small businesses. Some ideas were quite original, such as different bankruptcy laws especially for entrepreneurs or bankruptcy insurance. The students decided individually which suggestions they felt were most feasible and wrote letters to a senator, a congressman, or the president. As replies began to come back from members of Congress, students seemed genuinely pleased that their views had received recognition. Only one student received a reply from the president before school ended, and next year I think I will suggest that students write only to members of Congress if they want replies.

Evaluation

Students were evaluated in a number of ways. The more subjective methods included classroom discussion of the terms and concepts, the questions students asked speakers, the oral reports students made on their field trips, and the level of understanding shown in letters to elected officials. A somewhat more objective measurement was obtained from the short papers students wrote on the choices faced by Eddie Enterpriser and from projects consisting of a poster on a particular economic concept together with newspaper articles illustrating that concept. Students were instructed to explain how each news article related to the economic concept. The most objective measurements were teacher-made tests and finally a standardized *Test of*

Economic Literacy published by the Joint Council on Economic Education. I gave a pre-test and a post-test, and the results were encouraging. The average score increased from 18 out of 46 to 30 out of 46, with individual scores increasing from 5 to 17 points each.

Even more important, but less easily measured, was the change of attitude of students toward economics. Students said that they enjoyed the economics unit and rated it very high on an evaluation form. One student said he now plans to take the subject in college, and several suggested later that all my units would benefit from a similar format. Students became participants in the great national debate over Reaganomics by writing congressmen or the president to make their views known. They continued to bring in news articles on economics as the year went on, and one class decided to do something concrete. Concerned because so few of their friends had had any exposure to economics, they wanted to make a slide show on the subject and denote it to the media center. We obtained a grant from the school district, bought some film, and started. It turned into quite a job, with students working inside and outside of school to finish it, and when they presented the film to the principal, who accepted it for the media center, they were proud of their work. They chose as the theme the importance of entrepreneurs in our economy, and that was their title: *The Entrepreneur*.

Entrepreneurs were the vital element in this unit, and students rated the entrepreneur-speakers as their most valuable activity. Too often economics can deserve its nickname of the dismal science because students are exposed only to the facts and figures of our economy. Facts and figures do not make our economy function; people do. They take the risks, start the new businesses, and create the new jobs. My students have met these people face to face, have talked with them, and become involved with them, and in the future when they think of economics, I believe my students will not think of facts and figures, but of the human factor in our system: the entrepreneur.

Teaching Economics through Utopian Literature

Jacqueline C. Griffin

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Background

At a time when social, political, and economic change occurs at an unbelievable and frustrating rate, it is easy for an individual to become confused in his beliefs concerning basic questions that shape our nation:

- Shall property be held privately, governmentally, or by society as a whole?
- What are the rights of an individual?
- What role should the government play in the economic life of the nation and in the welfare of its citizens?
- What form of economic and political organization offers the greatest freedom and prosperity to ordinary men and women?
- How should social change be accomplished?

I teach English in a high school which enrolls nearly 1,100 students, most of whom come from middle-class families. Our classes are grouped according to ability with basic, general, and advanced levels. When I decided to teach a course on "Economics Through Utopian Literature," I judged my tenth-grade class best suited for this project because of the difficulty of the materials I had selected for the unit. The students in this class read on level or slightly above and are motivated by an interest in learning and the desire for good grades. Furthermore, they participated freely in class discussions and enjoyed reading. Literature therefore appeared to be my best medium for accomplishing my goals. In particular, I wanted to encourage my students to seek answers to the questions I had listed above.

By reading James D. Forman's *Communism, Socialism, and Capitalism*, students compared the ideologies of nations. Then by reading Utopian novels that present other types of societies, the students began to find answers to the questions. Because most of the Utopian societies are highly interesting, they serve to cause readers to evaluate many aspects of their own lives.

Goals and Objectives

The overall goals and objectives of "Teaching Economics Through Utopian Literature" were to help students:

1. To understand the basic economic concepts that affect their lives now and in the future;
2. To relate basic economic terms to their reading and interpretation of content, such as free enterprise, private enterprise, competition, and the like;
3. To learn more about how the American economic system operates as it answers the five basic questions of economics;
4. To look at the American economic system and compare it with communist and socialist systems;
5. To designate the United States as a private-enterprise system;
6. To read critically when looking for specific concepts;
7. To analyze their own values and value systems;
8. To share openly their views without the threat of criticism by other students or the teacher.

Organization of the Unit

The unit "Teaching Economics Through Utopian Literature" was taught in the first four weeks of the last quarter of the school year. I felt that this was the most opportune time because the students had already experienced the basics needed for the written assignments and had enough literary background to allow greater emphasis on the economic, governmental, and social concepts contained in the reading material. By this time, too, they were comfortable with the teacher's methods and expectations and familiar enough with fellow students to function well within a group setting.

The unit began with a written pre-test to determine the students' understanding of basic economics. During the unit, several teaching techniques were employed. Lectures were used in order to introduce basic economic concepts at the beginning of the unit, to introduce *Animal Farm* (the novel read by the entire class), and to introduce Utopian literature before the assignment of specific novels. Class discussion was incorporated at various times, such as after films and completion of reading assignments. The class viewed two films and enjoyed the presentation of a guest speaker.

The unit closed with a post-test to determine the students' progress and an oral summation by the students and teacher of the strengths and weaknesses of the unit.

Activities

During the first two weeks of the unit, students were responsible for completing a number of individual activities. The first of these introduced them to economics as they read, "Free Enterprise: Is It Any Way To Live" (*Our*

Economic System). As a result of the reading, students were required to list five economic choices they had made during the past five years and five which they will have to make during the next five years. Students then discussed how these choices would be made in a centrally managed economy.

Two motivational films were shown during the unit. The first film was *Man's Material Welfare*, which was used to compare free-enterprise and socialist systems and introduced some of the economic concepts that were stressed in the unit.

After an exercise in defining economic terms, students were required to read the novel, *Animal Farm*. In their reading, they were asked to look for important economic, social, and political concepts and understanding brought out in the book. Chapter questions, a vocabulary assignment, a chronological log, and a test were among the student activities during this phase.

The second film, *Libra*, was shown during the second week. This was used as an introduction to the utopian theme and as a springboard for projecting the future of the United States in several issues of concern, such as the energy problem and the functioning of our economic system. At the conclusion of both films, a values questionnaire was administered in order to oblige students to think about the future. Specifically, responses were to be made reflecting personal opinions as to whether described situations (1) will happen, (2) will not happen, (3) should happen, (4) should not happen, and (5) are happening now.

Utopian novels were assigned to groups of students at the end of the second week. These works included *Fahrenheit 451*, by Ray Bradbury; *Brave New World*, by Aldous Huxley; *1984*, by George Orwell; *Player Piano*, by Kurt Vonnegut, Jr.; and *Gulliver's Travels*, by Jonathan Swift.

All the novels were read; the groups assigned completed the assignments on a specially prepared reporting form. In particular, students were to keep in mind the search for several economic, social, and political concepts and how these were presented in the readings. Each group was responsible for conducting a discussion and preparation of an oral report following an outline presented by the teacher.

Evaluation

The students' average grade on the pre-test was 65 percent. After the unit had been completed and the post-test given, that average increased to 74 percent. Though I am pleased with this increase, I feel that the real results of this unit will be seen throughout the students' lives. As I listened and talked with the five groups, I was surprised at their interest and concern for the social, political, and economic situations encountered in their reading. Each time a change in one of these domains occurs in our world, I feel that these students will be reminded of this study and analyze the change that has occurred and what its influence on their present and future might be. I feel these students have reconsidered many of their values in numerous respects and considered

the consequences of some of these values not only for themselves but for their nation. The students seem to appreciate better the advantages offered them in their free-enterprise system. One student even commented on the help this unit gave him in his civics class. This pleases me because it shows this student that a relationship does exist between subjects.

The unit had several strengths. First, it allowed the students exposure to six novels in four weeks. Second, it allowed the students to see examples of some of the major economic systems of the world, their strengths and weaknesses. Then, the time involved, while challenging the students to stay busy, did not extend the work beyond their ability or interest. The group assignment also allowed the sharing of views and thus an expansion of the students' vision. Finally, the different teaching techniques added interest to the class each day.

The major weakness I saw in the unit was the choice of *Gulliver's Travels* as one of the Utopian novels. All of the other novels were futuristic in scope and did not require any special student knowledge in order to read them. *Gulliver's Travels* deals with a special social, economic, and political period in England that the students needed to become acquainted with in order to understand the novel. I would suggest that Robert Heinlein's novel, *Stranger In a Strange Land*, replace *Gulliver's Travels*.

The students' comments were very positive, showing both interest and excitement concerning their study. Both students and teacher felt the time invested in this unit of study well spent.

GOOD IDEAS IN BRIEF: SENIOR HIGH SCHOOL

LINDA JANE GREENWOOD, a teacher at *Piper High School, Sunrise, Florida*, in conjunction with members of the Broward County Diversified Cooperative Training (DCT) Coordinators Association Curriculum Committee, developed a competency-based unit which is now recommended instructional material in a statewide project—Vocational Instructional Materials Acquisition Systems (VIMAS)—by the Florida Vocational Department. Free enterprise and consumer and economic education have been an integral part of the DCT program, since the materials learned in the classroom are immediately put into practice by students already holding jobs in the marketplace. The primary objective of the unit is to give students a better working knowledge of the free-enterprise system and their roles in this system. For each of the fifteen objectives of the program, students were given an information sheet to read as well as a related activity sheet to complete. Optional activities were also provided for each objective so that each student who read the information sheet was able to find an activity to complete which appealed to his/her particular learning style. Although the unit was used as an approach to group

assignments, it can also be used as an individualized learning activity package. Students were organized in both large and small groups, depending on the objectives being covered. Small group discussions proved to be more effective for sharing opinions. Resource materials, supplementary films, group discussions, and individual activities were included in the two and one-half week period allotted. A text was not required, but one is suggested. Pre-test and post-test scores revealed significant score gains on the part of the students who participated. Evaluations were also carried out daily as students completed their activity sheets and optional assignments. Enthusiasm at the outset of the unit was minimal but grew like a snowball as students progressed into the unit. At the conclusion, students rated this unit as one of the most worthwhile and interesting activities covered during the school year.

SHIRLEY LAMB, a social studies teacher in *Princeton High School, Cincinnati, Ohio*, organized a unit called "Our Economic System: An Experimental Economics Unit for High School EMR Students." The unit was designed to provide experiences that teach basic economic concepts to students who learn best by doing. Participants in the program were in grades ten to twelve and were from fifteen to twenty years of age. Each of the major areas of the seven-week project was introduced by a filmstrip series. *Understanding our Economic System* (Learning Tree Filmstrips LT942). The goal of the unit was to teach students an understanding of the American economic system. A major goal of the program was to allow students opportunities to learn how to allocate scarce resources. The participants viewed themselves as resources and providers of services; students made cards outlining talents and services they might provide and how these could be exchanged with other students who were in need of these services. Some of the activities included in the unit concerned inflation and opportunity costs. Students were given "money" amounting to \$2,000 on the first day of an auction in which they were allowed to bid on items listed on a bid sheet; the following day, they were given \$4,000 and told to bid for what they wanted. The students were rather surprised to find what had happened to the prices of the auctioned goods. An exciting, profit-earning culminating activity included in the unit was a three-day sale of goods made by the EMR students. In the process of this phase of the unit, the students learned about the role of advertising, price competition, production costs, and regulation and non-regulation of markets. A major feature of this activity was the involvement of parents, who became part of the project as investors in the production of goods which the students made for sale.

KAREN PATELLA, who teaches all subjects in all grades at the *Summit County Juvenile Court School*, in the Akron, Ohio public school system, designed and implemented a unit entitled "Economics and Crime," for a group of students ranging from nine to fourteen years of age. The central theme of the unit was to personalize the cost of crime and to have the students conceptualize the impact of crime upon the economy. Each lesson was designed to relate

directly and personally to the students and the economy. Because the average stay in detention for the students in the school was less than ten days, this unit was organized to include those economic concepts which could successfully be developed over one to three days. Included among the major topics were: "The Producer and the Consumer—Legal and Illegal," "Profits and Prices—The Influence of Shoplifting," "Investment in Human Capital—The Court and Me," "Diminishing Returns—How Much to Spend on Rehabilitation," "Comparative Advantage and Opportunity Cost—What Do I Get," and "Opportunity Cost and Crime." The lessons were usually given to groups of six or fewer students and were sometimes repeated to ensure individual attention. Emphasis was placed on the understanding of economic terms and phrases as well as on important concepts. Through the use of workshops, audiovisual aids, discussions, pamphlets, and other print materials, the unit was integrated in social studies, career education, art, reading, oral communication, composition, math, and sociology curricula. Despite the fact that the interest level for academic work is generally overridden by the student's preoccupation with release from detention, the unit was successful since attempts were made to personalize each of the lessons included in the program.

THOMAS W. MULLANE, a social studies teacher in *West Essex High School, North Caldwell, New Jersey*, engaged in an "inquiry" of the Japanese economy. Current sources of information on the topic were plentiful, since it commands a great amount of attention in our media and is of great interest to many Americans. Three senior high school classes, divided into groups of four, participated in the study. Each group was required to compile a bibliography and to write a paper answering specific questions relating to the Japanese economy. Questions included the types of economy, savings and growth rates, import and export problems, interrelationship of culture and economy, and the Japanese style of decision making. After this phase had been completed, a full class discussion was conducted in an effort to reach a "consensus" on the Japanese style. The class wrote a single position paper after much discussion and debate. Great assistance was provided by the Japan Information Center in New York City. Through their generosity a large number of informative pamphlets were added to the library. The students indicated a considerable increase in their understanding of the Japanese as they searched for answers to the questions and evaluated their position paper. The inquiry provided an opportunity for students to reflect upon and reinforce their understanding of such concepts as types of economic systems; growth, savings, and investment; the law of comparative advantage; and the goals of an economy. Since comparisons to the American economy, its style, and values were inevitable, this study strengthened the understanding of our own economy as awareness and appreciation for that of Japan was achieved.

MARGUERITE ROSS COWAN, a business education teacher in *Fayetteville High School, Fayetteville, Arkansas*, developed a unit called "SEEK"

(Secretaries Explore Economic Education). The unit, presented during the second semester in the second hour of a two-hour-per-day typing class, lasted six weeks and covered sixteen key economic concepts. Participants in the program were juniors and seniors enrolled in an Intensive Lab/Office Simulation class. Presentations were made using transparencies on an overhead projector as each of the concepts was detailed, illustrated, discussed, and related to a contemporary news article. Students took notes and, in groups of three, made bulletin boards depicting each concept. Newspapers were brought into class and students shared in the reporting of daily events. Toward the conclusion of the presentations, students were assigned to visit a business or professional organization. Arrangements had been made in advance for students to observe retail sales, utilities, banks, communications, industries, governmental and education offices, food services, and professionals in operation. Prior to the visits, concepts applicable to the assigned business were studied in depth. The goals that each student would try to achieve were determined beforehand, together with a list of at least six pertinent questions that were to be asked. Upon their return to the classroom, written reports were made and shared with the class. In this way, all participants gained from the experiences of their classmates. Pre-tests and post-tests in economic literacy were administered to determine the increase in economic knowledge gained by the students. Ninety percent showed significant improvement. Since the students will be entering the business world in the relatively near future, this unit served to provide an excellent orientation and some of the economic knowledge needed to succeed there.

LOREN DUNHAM, who served as a curriculum designer for this project, and LOWELL FARLAND, a twelfth-grade social studies teacher at *Ceylon High School, Ceylon, Minnesota*, worked together on the pilot testing of "Integration to Economics," a microcomputer-videodisk project under development by the Special Projects Division of the Minnesota Educational Computing Consortium (MECC). The purpose of the project is to demonstrate that low-cost personal computers and home videodisk players can be programmed to deliver a complete high school economics course to students. The project puts the student at the center of an interactive learning experience as he uses lessons written for and delivered by an Apple II microcomputer interfaced with a videodisk player. After a brief introduction, including a statement of learning outcomes, the student is introduced to either the videodisk player or the microcomputer. Together, the components offer instruction, examples, evaluation, and remediation. The courseware was designed to require a minimum amount of teacher assistance, but provides the opportunity for the teacher to interact with students during instruction or to facilitate the learning process by meeting with the participants as frequently as desired. When completed, the microcomputer-videodisk economics course will be the equivalent of a one-semester high school economics course. Unit one was completed and field tested, and unit two is nearing its final production stage. The economic

content of the course was developed with close attention to the Joint Council on Economic Education's *Master Curriculum Guide, Part I—A Framework for Teaching Economics: Basic Concepts* (1977). A total of five units are planned, as follows: "Introduction to Economics," "Roles," "Markets," "Stability," and "Policy." Each of the units will include ten to twelve sessions.

DAVID E. O'CONNER, a teacher of social studies at *Edwin O. Smith School, Storrs, Connecticut*, designed a fourteen-period unit which used the E. O. Smith school budget as the material with which to examine how decisions affecting the lives of the school's students were made. The study was highly relevant because it dealt with a matter close to the students. The first unit of the year served to introduce the economic concepts of scarcity, choice, and opportunity cost to eleventh- and twelfth-grade students enrolled in the elective course in economics. It also acquainted students with a process for making economic decisions and cautioned them to guard against basic fallacies and biases. Hence, the basic problem of scarcity along with a key process for addressing this problem were built into the study. Through a variety of guest speakers, interviews, surveys, and local published sources, students were able to both examine and evaluate the budget. Appropriately, this investigation also utilized low-cost or no-cost human resources available from the community, including the school's administrators, Board of Representatives (Education), community, faculty, and student body. Specifically, student research focused on which opportunity costs were acceptable to the larger community, and what budgetary priorities different groups had established. Students later shared their findings during three class periods set aside for oral presentations. Print materials included copies of the 1981-82 school budget, the school statement of philosophy and objectives, and local newspaper accounts of budgetary matters. Finally, consistent with the "English across the curriculum" philosophy, students practiced writing one-paragraph and five-paragraph essays. The study, therefore, included a reasonable integration of social studies, business, and English programs. The mastery of content and skill areas was determined by student performance on the final essay, "A Look at Opportunity Costs in a High School Budget: An Evaluation." A follow-up evaluation in the form of a midterm examination served to review both the concept of opportunity cost and the paragraph form.

SUE DEVERO and JIM SHROPSHIRE, teachers of marketing and distributive education in the *Southside Senior High School, Fort Smith, Arkansas*, developed a unit entitled, "How to Spend Your Summer," which capitalized upon their students' desire to wear fashionable "in" clothing and economic conditions in the nation. Because of inflation and unemployment, students found themselves in a dilemma between peer pressure to wear the desired clothing and reduced income available to purchase it. Because of this situation, it was decided that organizing a unit on decision making to both better their situations and reduce peer pressure would provide an important and

relevant focus. While economic concepts were introduced each year in the economics unit, the approach used for this unit was to focus teaching materials toward clothing selection through comparative shopping. The emphasis of the program was to educate the students that they could dress well for all occasions and have the resources necessary to purchase some designer clothing by using comparative shopping and by making some wise trade-offs. The culminating activity for the unit was a style show, which was used effectively to demonstrate to the student participants and the entire student body that the notion of comparative shopping was an important concept. Each student had been provided with a "fashion economics" form to use during the style show on which to estimate the cost of the clothes being modeled by the students. When the forms were tabulated, it became plainly evident that most students could not tell the difference in cost between designer clothes and the clothes from discount stores, as these were modeled by their friends.

The Media Center: A Vital Resource for Learning Economics

Nancy Mayner

Morrison Elementary School, Fort Smith, Arkansas

Rationale and Goals

"Why don't we have more than one copy of *Superfudge*?" This question about a very popular Judy Blume book was posed to me, a media specialist, by a sixth-grade student and became the rationale for giving meaning to library-media skills by using economics in our media center activities during the 1981-82 school year.

My goals for this study were to teach fourth-, fifth-, and sixth-graders to recognize economic concepts encountered in media materials, to learn a great deal about the economics involved in making media resources available to them, and to learn basic library-media skills in order to better utilize these valuable resources.

Teaching Strategies

Each class had a forty-five-minute scheduled block of time each day during which a group of students from that class came to the media center to participate in economic experiences and learn specific library skills. I developed worksheets for use during this time as a follow-up to reinforce the economic concept being taught and the library-media skill being perfected.

A variety of visuals were displayed in the media center throughout the

*The "Open Category" is a relatively new addition to the National Awards Program for the Teaching of Economics to encourage educators whose responsibilities are not defined by traditional grade-level distinctions; e.g., primary grades, intermediate grades, etc. Among those who are eligible and were encouraged to submit projects to the awards program were school librarians, curriculum supervisors, and school administrators. Such individuals frequently have multigrade and/or schoolwide/school district responsibilities.

year and used as teaching tools to help meet the objectives. As each economic concept or library-media skill was introduced and developed, a committee illustrated it on a bulletin board. A large glossary chart of economic terms and phrases was displayed throughout our study. Students took turns keeping this glossary current as new definitions were introduced and learned. An easel chalkboard was utilized to ask weekly economic questions or state economic facts. The students were encouraged to submit questions and facts for use on the "Did You Know?" board. In addition, a display of oversized book covers, each listing a different economic concept, was placed on a wall in the media center. These resources were used continually for review and evaluation.

Books which illustrated an economic concept were put on an economics books cart and were available for checking out. As we progressed in our study, I encouraged the students to add books as they recognized economic ideas in their reading.

One of the study carrels in our media center was set up as an economic learning center for individual, independent learning. The materials were changed when our economic concept emphasis changed. The carrel was equipped during the year with a variety of media center resources—filmstrips with economic content and emphasis; activity sheets reinforcing economic understanding; books and pamphlets with appealing, interesting economic content; magazines with articles of special economic interest; the daily newspaper with news of economic issues in our city as well as around the world; and story records of the lives of famous Americans and famous events which taught the importance of economics in the history of our country. The students used this resource at any time during the day that they were free to come to the media center.

Trade-offs films, obtained from the Bessie Moore Center for Economic Education on the campus of the University of Arkansas at Fayetteville, and several resource people were also utilized to help meet the objectives of this project.

Teaching Basic Economic Concepts and Library-Media Skills

The teaching strategies were employed as nine basic economic concepts were studied and related to the media center—scarcity, opportunity cost, productive resources, financial institutions and the circular flow, resource extenders, market economy, economic goals, interdependence and trade, and economic decision making.

Scarcity. Every student had already coped realistically with the problem of scarcity, so it was an easy concept for them to understand.

During the first week of our study, I showed each group a copy of Judy Blume's popular book and asked them the question which had prompted this study: "Why don't we have more than one copy of *Superfudge*?" They replied: "You didn't have enough money to order more"; "You didn't know we would like it"; "We just need one copy"; "The publisher ran out of copies." Without

realizing it, they had verbalized the relationship between scarcity of a library book and such related economic concepts as needs and wants, allocation of resources, and opportunity cost.

A worksheet, "The Problem of Scarcity," was written for use with all students to reinforce this concept and to relate it to a story in the media center. They were asked to select a library book which illustrated the conflict between unlimited wants and limited resources. What was the conflict between the characters' wants and needs? How was the conflict solved?

The library-media skill reviewed on this worksheet was locating and describing the information on the title page. The students were asked to find the title page and use the information on that page to answer some specific questions about the book: Title? Author? Illustrator? Publisher? Place of publication? Copyright date?

Opportunity cost. A budget allocation for some new media center equipment was used to illustrate how choices must be made. One hundred and fifty dollars were available for the purchase. Using the chalkboard, a list was made of needed items—a newspaper rack, storage for computer program cassettes, a mobile cart for the computer, and a record browser.

The students were divided into groups, given catalogs of media center equipment, and reminded that their total cost must include taxes and shipping charges as explained in each catalog.

The task of each group was to select the best alternative and the second-best alternative from the list of needed equipment items. The opportunity cost varied with the committee reports, but it was agreed that the best alternative was a mobile cart for the computer. One was ordered, and the students took a special interest in its arrival several weeks later.

A worksheet, "Opportunity Costs: A Costly Choice," was structured to familiarize students with the real cost of their decisions and to help them recognize opportunity cost as used by the writer of a library book. The students were asked to think of a book which illustrated choices and opportunity cost. They wrote the title of the book and named the choice that was made and the opportunity cost that the text illustrated.

The library-media skill stressed in this worksheet was that of using the table of contents. A sample contents page from the popular economics book *How to Grow a Hundred Dollars*, by James and Barkin, was used to ask questions about specific chapters.

Productive resources. A book from our media center, *How to Turn Lemons Into Money*, by Armstrong, was read aloud to develop the concept of productive resources. The students then recognized the resources used in the production of a book. Their ideas included "an author," "trees for the paper," "land on which to build the publishing building," and "a publisher to take the financial risk."

Illustrations in Greenfield's book, *Books From Writer to Reader*, were used to acquaint the students with the real capital goods and equipment which were used to publish books.

The students were asked on the worksheet—which had been written to reinforce learning what productive resources are—to name the factors of production which they had encountered in the media center.

The library-media skill stressed on this worksheet was using the index of a book. It was stated that the index would tell the reader if a book had any information about the factors of production. A sample index was given and questions asked about the factors of production in that book.

Financial institutions and the circular flow. I wanted the students to see how the circular flow of money included tax funds to supply our media center budget and to show the role of financial institutions in the process.

Initially, the concept of the circular flow was introduced through manipulative visuals of a home, a business, and a market. A government building and Morrison School were added to show government tax money going to our school.

A speaker from a local bank provided facts about sources of school revenue and the role of financial institutions in school financial business.

A worksheet was written to reinforce the concepts of financial institutions. In addition, the circular flow was reviewed in order to reinforce what was learned from our discussion of how each family had a stake in our Morrison School media center budget.

The library-media skill taught was the definition of and the location of the glossary. Seven terms which related to financial institutions and the circular flow were listed: check, currency, savings bank, commercial bank, checking account, Federal Reserve System, and investment. The students were asked to find these terms in the glossary of any book or books and write the definitions.

Resource extenders. A filmstrip about Marguerite Henry (*Meet the Newbery Author: Marguerite Henry*) was shown to help students identify authors and illustrators as resource extenders.

Each student wrote a letter to a favorite author or illustrator asking how interests, abilities, and education had prepared each for the work. Questions of economic significance were also asked. The letters were mailed to the publishers. The personal letters that the students received in response were an exciting part of our study.

Technology and its impact on extending resources were taught by tracing the development of printing. The students made a series of transparencies which traced this development. The series was added to our transparency collection in the media center.

A worksheet was written to review, with each grade level, what had been learned about resource extenders. Specialization and technology were reviewed as ways in which people had attempted to make better use of resources. The students were asked to name three resource extenders they had seen in our school that day and tell what technological tools or machine each was using.

The library-media skill stressed on this worksheet was the arrangement of fiction books in alphabetical order by the author's last name.

Market economy. Using a variety of media, we examined the different

economic systems and developed an understanding of how a private-enterprise system works and the privileges and advantages of such a system for libraries, literature, and authors.

The worksheet developed to review the students' understanding of the market economy of the United States gave some definitions and listed some terms which I was able to use throughout our discussion to evaluate their learning of this concept.

The use of the card catalog was the library-media skill stressed on this worksheet. The card catalog was identified as the resource which would help the students find a book about the free-enterprise system in our media center. The students were given practice in recognizing the three kinds of cards found in the card catalog: author, title, and subject.

Economic goals. This phase of our study dealt first with individual goals so that the students could better understand the economic goals of our nation—freedom, justice, growth, stability, and security.

Poland was in the news at this time, and magazine and newspaper articles about the imposition of martial law in that country were used to motivate a comparison of the goals of countries living under different economic systems.

Economic goals were related to the Bill of Rights through the worksheet written for use with this concept. Employing the library-media skill of using the Dewey Decimal System to find nonfiction books, the students found a book containing a copy of the Bill of Rights and answered these questions: In which Dewey group would it be? Between which numbers would the book's call number fall? After finding the Bill of Rights, the students decided which economic goal fit each amendment.

Interdependence and trade. This concept was used to introduce the students to the use of reference materials as valuable tools: the encyclopedia, the atlas, and the almanac.

A simple item, chocolate, was used to help students think about interdependence and its effect on their lives on a global scale.

This phase of our study was also used to help the students realize the economic reason for interdependence and trade between libraries and media centers. We used economic materials from our Fort Smith Service Center and films from the University of Arkansas Bessie Moore Center for Economic Education; all of the classes at Morrison depended on our media center for media materials.

Economic decision making. The reasoned approach of economic decision making was related to the purchasing decisions made in the media center.

After using the five steps of economic decision making in several situations, the students participated in the actual selection of books to include in our annual order.

Concluding Activity

The Charlie May Simon Children's Book Award for children's literature, sponsored by the Elementary School Council of the Arkansas Department of

Education, is presented annually to an author whose book has been selected through a vote taken by Arkansas school children in grades four, five, and six. The announcement of the winning author for the 1981-82 award provided a relevant and timely culminating activity for our project.

Bill Brittain won the award for his book, *All the Money in the World*. The students wrote and presented a play illustrating the economic concepts in the book.

Evaluation

I was delighted with the ways in which the students recognized economic concepts in the book *All the Money in the World* (used for our culminating activity) and decided to expand the idea and give them an opportunity to recognize economic concepts in a variety of media materials as an evaluation of economic understanding gained during our study.

A wide variety of resources was set up for this evaluative process—filmstrips, magazines, newspaper articles, a computer game, records, and television programs. A ditto worksheet, "Economic Review," was developed for the students to complete, telling what economic concepts or ideas they recognized.

One of the most effective forms of evaluation was a resource speaker from the Fort Smith Public Library. The children's librarian came to our school during National Library Week and, without being prompted, filled her talk with economics! A follow-up activity sheet evaluated how well the students could apply the economic concepts we had learned to what the librarian told the group about the job.

Another form of evaluation which I found particularly satisfying was the use of economic terms and concepts which these students revealed in projects in their own classrooms. Book reports, exhibits, and science fair experiments all revealed economics learning.

The post-test scores revealed that the students had increased their understanding of basic economics and of library-media skills.

The planning and development of this project was fun and rewarding. Truly, the media center is a vital resource for the teaching and learning of economics.

Economics Curriculum Guide: Portland, Maine, Public Schools

Mary Jane McCalmon

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Introduction

Every society must face the reality of economic scarcity since a gap always exists between resources available and people's wants. Every society must therefore create a set of institutions called an economic system to manage its scarce resources; an economic system will provide answers to the vital questions of which goods will and will not be produced, which resource mix will be used in their production, and how these goods will be distributed among members of the society.

The purpose of economic education is not to prepare people to be economists, but to help them understand the purpose, organization, and operation of their economic system. Before leaving school, students should have a sufficient background in economics to enable them to make informed and intelligent decisions in the marketplace and in the voting booth. The development of understanding in economics and decision-making skills requires a sustained and systematic effort. The teaching of basic economic concepts should begin early in the students' careers so that teachers in succeeding grades can build on an even sturdier foundation. Early economic experiences which relate to children's own environments will gradually be enlarged upon until their understanding encompasses national and international economic concepts.

The curriculum guide which was developed for Portland schools was designed to put these beliefs into practice. A few basic economic concepts were targeted for each grade level, and, starting with the child's immediate surroundings, the economic systems examined became wider and wider as the economic concepts mastered became more complex as they reinforced and built upon previous learning.

The Economics Framework

Indicated in the matrix are the major ideas and spheres of emphasis for each grade level:

Grade Level	Major Ideas	Spheres of Emphasis
K	Producers and consumers Goods and services	Individuals
1	Scarcity Income Choice-making Opportunity cost	Individuals and families
2	Wage and salary income Variable income Redistribution of income Saving and investment	Family and community
3	Productive resources Resource scarcity Choices Opportunity cost	Larger economic system
4	Government production and consumption Taxes Choices Specialization Interdependence	State and/or national level
5	Barter exchange Money exchange Scarcity Supply Demand	Markets
6	Traditional economic system Command economic system Market economic system Mixed economic system (Evaluation of systems using goals of freedom, economic efficiency, and equity)	International
7	Productive resources Economic indicators International trade Exchange rates	Cultural geography
8	Scarcity/choice Money Regional interdependence and comparative advantage Land, labor, and capital	American history and Maine history

Grade Level	Major Ideas	Spheres of Emphasis
9	Scarcity Aggregate supply and productive capacity Economic growth Economic incentives and investment Income distribution	Western civilization
10	National choice-making Unemployment and inflation Trade-offs among social goals	Twentieth-century world history
11	Economic growth Government regulation Economic stability Monetary and fiscal policy	American history

Concept Statements

For the purposes of this abstract, it would be impossible to list each of the grade-level concept statements which were developed. Listed below are examples of the concepts that were included for each of the grade levels and subject areas:

- Grade 1:** Individuals and families
People's wants for goods and services seem to be never ending (scarcity).
- Grade 2:** Family and community
Labor income, in the form of wages and salaries, is the major source of income for most households (wage and salary income).
- Grade 3:** Larger economic systems
Goods and services that we consume must be produced with resources (productive resources).
- Grade 4:** State and/or national level
Government finances most of its purchases with income from taxes (taxes).
- Grade 5:** Markets
The use of money by individuals is a more efficient way of exchanging goods and services than exchange by barter (money exchange).
- Grade 6:** International
"Economic systems" are created to make decisions on what a country should produce, how those goods should be produced, and how the output should be distributed. Four major types of economic systems can be identified: traditional, command, market, and mixed.

- Grade 7:** Social studies/geography
International trade is an important factor in economic geography (international trade).
- Grade 8:** U.S. history
Puritans, early settlers: Productive resources were limited. The task of allocating limited resources among competing users has confronted all societies throughout history. This concept helps explain how societies have adapted to their environment. People's economic choices are influenced by available resources in their environment (scarcity/choice).
- Grade 9:** Western civilization
Prehistoric people found they could not supply all their wants. The problem of scarcity underlies all economic problems. Nomadic hunting was the basis of the economy (scarcity).
- Grade 10:** Twentieth-century Europe
Rise of dictatorships: conditions during and after World War I brought about economic upheavals which led to political chaos and the rise of dictators. Uncontrollable inflation and worldwide depression marked the era (unemployment and inflation).
- Grade 11:** U.S. history
Technological improvements and mass-production techniques resulted in great social and economic changes such as the rise of labor unions and populism, as the U.S. developed from an agrarian nation into an industrial giant (economic growth).

Organizational Format

As indicated, the Portland Curriculum Guide includes a framework which lists grade levels, major ideas, and concepts to be developed at each grade level, and the spheres of emphasis; e.g., individual, family, community, state, nation, and so on. Following the framework, a series of concept statements were developed for each grade level and sphere of emphasis.

A major development in the guide relates to the activities which have been developed to ensure the effective and meaningful presentation of the concepts at each grade level and subject area. The activities include, where appropriate, rationale statements, objectives, procedures, handout materials, transparency masters, quizzes, and bibliographies. The teacher who uses the guide should therefore have relatively little difficulty in presenting economic education in the classroom.

On Target All the Way with PETE!

PET + Economics = PETE

(Program for the Effective Teaching of Economics)

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Introduction

The idea for this project was sparked by the question, "What staff development activities can we promote in the Fort Smith public schools that will enable classroom teachers to become more effective teachers of economics?"

All five authors of this project were certified instructors in the Program for Effective Teaching (PET) that is currently being promoted in Arkansas. The PET model was originally developed by Dr. Madeline Hunter, principal, University Elementary School, and lecturer, Graduate School of Education, University of California, Los Angeles.

The PET model deals with Bloom's taxonomy and the following five instructional skills: selecting an objective at the correct level of difficulty, teaching to the objective, maintaining the focus of the learner on the learning, monitoring and adjusting, and using without abuse the principles of learning.

To our knowledge, no school system had attempted to apply the Program for Effective Teaching to a system-wide approach to teaching economics. In September 1981, the Fort Smith School District was scheduled to begin a series of PET cycles for classroom teachers. Why not recruit teachers from these cycles to work in the economic experiment? We decided to create a model for teaching economics that would be called PETE (Program for the Effective Teaching of Economics) in which we would use the principles of PET to do a more effective, efficient, and relevant job in teaching economics.

Plan of Action

The plan of action called for the five district-level administrators to work cooperatively throughout the school year by using four essential steps to develop the PETE model.

Step 1: Recruiting inservice teachers and conducting economic seminars. Beginning August 14, 1981, a series of seminars in economics was held throughout the school year for the primary purpose of helping teachers to increase their understanding of the subject.

Step 2: Discussing and modeling an economics lesson. The second step called for the instructors to model for teachers the effective teaching of economics lesson. The following skills were demonstrated by the instructors:

1. How to select *economics objectives* at the appropriate level of difficulty and complexity;
2. Teaching to the economics objective;
3. Making effective use of Bloom's taxonomy;
4. Maintaining the focus of the learner on the economics learning;
5. Monitoring and adjusting to the needs of the students;
6. Using sound principles of learning.

Step 3: Observing teachers in the classroom and holding follow-up conferences. The third step called for the participating teachers to teach four economics lessons during a period of several weeks, using the same approach that one of the instructors had modeled in the six days of formal input sessions. These lessons were observed and follow-up conferences were held.

Step 4: Feedback from students and teachers. In the initial experiment, the plan of action called for an extensive method of feedback from students and teachers. The intent was to ascertain, at the end of the 1981-82 school year, whether or not this approach was having a positive impact on the students in the classroom.

Economic Goals

1. Given proper instruction in a series of economic seminars, the inservice teachers will demonstrate in the classroom that they have acquired a working understanding of such basic economic concepts as scarcity, resources, institutions, interdependence and trade, economic analysis, circular flow, resource extenders, the economic goals of the nation, and market economy.

2. All teachers participating in the project will teach a series of economics lessons to their students by integrating economic concepts with other subject-matter areas.

3. The students will learn from the series of economics lessons how to define and use in written and verbal communication a variety of economics terms such a scarcity, market system, opportunity cost, competition, private enterprise, financial institutions, supply and demand, productive resources, economic goods and services, circular flow, interdependence, and economic goals.

4. Upon completion of a series of economics lessons to be taught in the classroom, the students will be able to pass a post-test, covering a wide range of economics topics, with a grade of 80 percent or better.

5. Upon completion of a series of economics seminars held for inservice teachers, the teachers will pass a post-test with a grade of 80 percent or better.

Staff Development Goals

During the period of training, all participating teachers will learn how to:

1. Select economics objectives at the appropriate level of difficulty and complexity by analyzing the teaching task in terms of the learners' readiness and ability to grasp the economics concepts to be taught.
2. Teach to the economics objectives by using the following fourfold approach with students in the classroom:
 - a. Explanation
 - (1) Definition: clearly defining all economic terms and meanings
 - (2) Process: presenting economic ideas in certain steps or in a certain order
 - (3) Example: using economic models, samples, and a pattern that shows what fits into a category
 - (4) Modeling: guiding the learner through the economic learning
 - (5) Content: giving all economics information that is pertinent to the learning task
 - b. Questioning: posing questions to the learner for a variety of reasons to enhance economics learning
 - c. Activity: practice which reinforces and extends economics learning
 - d. Responding to the learner in terms of the economics learning (keeping the learning on track)
3. Use Bloom's taxonomy as a model for planning and sequencing of economics instruction.
4. Maintain the focus of the learner on the economics learning.
5. Monitor and adjust to the needs of the learner as the lesson progresses.
6. Plan an economics lesson with an awareness of the following principles of learning:
 - a. Reinforcement
 - b. Motivation
 - c. Retention
 - d. Transfer

Conducting the Experiment

Conducting the experiment proved to be a fascinating but very involved task. The written narrative simply reveals a few highlights of the many activities that were conducted throughout the year.

Helping teachers learn basic economics. The instructional team planned an agenda for each seminar that was geared mainly to helping teachers who had not been active in teaching economics. These seminars included a basic overview of economics and how these concepts could be presented to students in the classroom.

In addition to local instructors, outside consultants were invited to help. Dr. Tom McKinnon, director of the Bessie Moore Economic Education Center at the University of Arkansas, conducted an afternoon and evening workshop for thirty teachers on basic economics. He used lectures and films in giving an overview of our economic system. He dealt with our unlimited wants for goods and services (both individual and social) in terms of our limited resources (labor, land, capital, and entrepreneurship).

Sue Hendricks, staff supervisor and educational relations specialist, Southwestern Bell Telephone Company, held a workshop on decision making in business. The "New City Telephone Company Simulation Game" was used as a basis for studying corporate decision making.

The instructional team (Dr. Owen, Ms. Hunter, Mr. Scherrey, Mr. Soucy, and Mr. Floyd) continued to hold seminars covering a wide range of economic topics, such as activities in the financial marketplace, the economics of business, capital investment, economic issues in American democracy, and what every teacher should know about economics. The topics were frequently geared to requests by teachers for help in units that they were teaching. A large collection of economic filmstrips, books, and other print materials was maintained in a central depository for teachers' use as needed.

Modeling economics lessons for teachers. While many economic lessons were modeled for teachers during the development of the Program for Effective Teaching of Economics, this narrative contains only four brief examples.

One instructor demonstrated selecting an economics objective and teaching to the objective by using primary children. With the objective, "The learners will identify in oral and written exercises three productive resources and demonstrate in a class activity their understanding of how these resources are used to make a good," the instructor demonstrated the four components of teaching to the objective (explanation, activity, questioning, and responding to the learner in terms of the economics learning).

The participating teachers were learning that basic economics could be taught more effectively if a good instructional model was employed.

Another instructor modeled a lesson on consumer choices by using this objective: "The students will list from memory the eight steps of decision making for consumer choices and demonstrate in class activities that they understand the process." While teaching the students the eight steps of decision making for consumer choices, the instructor took the students through the following steps in Bloom's taxonomy: knowledge, comprehension, application, analysis, synthesis, and evaluation.

In a subsequent session, an instructor demonstrated maintaining the focus of the learner on the learning and monitoring and adjusting, by teaching a lesson on opportunity costs using this objective: "The learner will demonstrate his understanding of the concepts of economic decisions and opportunity costs by actively participating in a class activity of 'how best to spend our \$25.00'."

The principles of learning (motivation, reinforcement, retention, and transfer) were modeled in an economics lesson with this objective: "Given a

simulation investment situation, the learner will demonstrate his understanding of fixed versus liquid assets in an inflationary economy by investing \$50,000."

The teachers who were involved in helping develop the PETE model were obligated to do their practice in the area of economics and to teach their economics lessons with one of the administrators serving as an observer.

Observing teachers of economics in the classroom and conducting follow-up conferences. While the five administrators observed many teachers and held follow-up conferences (over fifty teachers were involved in developing the PETE model), this narrative includes only four examples from four different lessons by four different teachers.

A second-grade teacher had as an objective, "Given a discussion of the concepts of needs and wants, the learners will demonstrate an understanding of these concepts by finding pictures of examples of each of these concepts." Using all of the steps in selecting an objective and teaching to the objective, the teacher developed a thorough understanding of needs and wants.

A sixth-grade teacher used this very simple objective: "Given proper instruction in bartering and the use of money, the students will list and discuss five reasons why bartering is less efficient than using money."

The primary aim of the observer of the lesson was to ascertain the levels of difficulty and complexity in Bloom's taxonomy that were reached in the lesson.

In a lesson that encompassed a wide range of bartering, the following reasons were agreed upon for using money instead of barter:

1. Getting what a person wants might require many trades.
2. Values are hard to compare.
3. Barter materials may be hard to transport.
4. Barter materials are hard to save for a long period of time.
5. There are some things a person cannot get by bartering but could acquire with the use of money.

In the follow-up conference the teacher and the observer agreed that the objective was at the correct level and that the teacher taught to the objective. The teacher reached the *knowledge* and *comprehension* levels of Bloom's taxonomy.

A junior high school teacher taught a mathematics lesson to seventh-grade students using the following terminal objective: "You will define and discuss in your own words and term 'economics'." This was the first in a series of economics lessons that the teacher used with a mathematics class in an effort to help the students understand how the number system was developed in an economic setting.

In the discussion the teacher attempted to show that numbers were not too important until distribution of goods and services took place.

The teacher maintained the focus of the learner on the learning at the

outset by questioning and relating the story to past and present learning. In addition, the teacher made clear the statement of learning, and the students knew that they must gain a conceptual knowledge of economics because they were to discuss the term in their own words.

Moving to higher level of instruction, a twelfth-grade history teacher had the following objective: "The students will learn the progressive reform laws and the program to regulate big business that were started by President Wilson in his first term."

Stressing the economic implications, the teacher explained that President Wilson's reforms were designed to "break down barriers to individual enterprise." In passing the tariff reform, Mr. Wilson was not so much interested in "free trade" as he was in the free opportunity for American business. The proposed duties would raise some revenue for the Treasury, but they would not enrich industries. Overall, duties were reduced about eleven percent. To make up for the lost revenue an income tax with low rates was included.

Currency and banking reform were treated in terms of the economic impact they had on the country. Since the 1870s the money supply had failed to keep pace with the rising output of goods and services. A banking system had to be developed that could stop a "run" on deposits. The Federal Reserve Act of 1913 set up the Federal Reserve System and created a flexible new national currency, Federal Reserve notes. Banking reserves could now be mobilized in time of panic.

In the follow-up conference, the teacher discussed four principles of learning that were used in the lesson. Good motivational techniques were used. Interest was high throughout the lesson because the teacher explained how the economics of that time was relevant to the students' world of economics today. Politically, historically, and economically, the students could always see a relationship between Mr. Wilson's world and theirs. There was both positive and negative reinforcement. When one student explained how the Federal Reserve Act of 1913 affects his current bank accounts, the teacher said, "That is right. You have been listening and studying the material. Good for you!" Retention was assured as the teacher aimed at a very high degree of original learning. He used repetition to be sure that the students thoroughly understood the Clayton Antitrust Act, tariff reform, currency and banking reform, and so on. Meaning was always paramount. A frequent question was, "What does that mean to you now?" Transfer of learning was stressed in a number of ways. In teaching about the Clayton Antitrust Act, the teacher asked, "Now that you understand this act, will this help you understand how business operates when you go shopping at the mall this evening?"

Evaluation

In order to ascertain the degree of positive effect which the PETE model was having on the students in the classroom, feedback was secured in four different ways. Pre-tests and Post-tests of the Joint Council's published test instruments, *Primary Test of Economic Understanding* (grades 2-3), *Basic*

Economics Test (grades 4-6), *Junior High School Test of Economics* (grades 7-9), and *Test of Economic Literacy* (grades 11-12), were administered to the students of participating teachers. Locally prepared tests were also administered on a pre-test and a post-test basis. A teacher opinion survey instrument was administered to all participating teachers near the end of the school year. Participating students and teachers were interviewed in an effort to ascertain their feelings about how the program was working.

Significant gains were registered in every classroom where the Joint Council test instruments were used in pre-testing and post-testing. An even greater gain was registered on locally prepared tests.

In a survey that was designed to determine the effectiveness of the use of the PETE model, fifty participating teachers were asked, "To what degree has the PETE model favorably influenced your teaching of economics?" Using a numerical scale of one to ten, with one indicating the lowest level of influence and ten indicating the highest, the teachers responded by rating all ten items with an average eight or nine.

In interviews with participating teachers and students throughout the school year, responses regarding the experiment were taken in both oral and written form. Listed are a few selected comments.

Student comments

"Class work is more interesting."

"Everybody stays busy. No one is goofing off."

"We stay on the subject now."

"Kids like it."

"I know the teacher is going to ask me questions."

Teacher comments

"Very good and very useful. I thoroughly enjoy using the PETE model to teach economics."

"I feel that I gained a sense of satisfaction from things I recognized in my teaching of economics and also a challenge to improve in areas where I saw need for improvement."

"I think this program was very well done as a whole."

"Learning about teaching to an objective has made a big difference."

Near the end of the school year, it was obvious that more teachers were teaching economics and doing a better job than ever before in the Fort Smith public school system.

Introducing the Big Brown Bag

Economics of the American Food System

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Origin of the Program

For the past three decades, individuals involved in economic education have endeavored to develop processes through which economics could be taught at the pre-college level. These processes have included conceptual models, classroom materials, teacher-training materials, audiovisual media, or teacher-training programs. The processes have been successful to a greater or lesser extent in (1) stimulating interest among pre-college teachers toward the teaching of economics in their classrooms, (2) instructing these pre-college teachers in basic economic concepts, and (3) providing classroom-ready materials for these pre-college teachers.

Program Goals and Objectives

The intent of "*The Big Brown Bag: Economics of the American Food System*" materials and dissemination program was to accomplish all of the above goals. Specifically, the objectives of this program were to:

1. Develop classroom materials designed to assist teachers in grades 4-8 in teaching about the economics of the American food system;
2. Orient these materials around the Joint Council on Economic Education's (JCEE) new guidelines for teaching economics through consumer education topics as described in Brenneke *Integrating Consumer and Economic Education into the School Curriculum* (New York: JCEE, 1981);
3. Plan and carry out a system for training pre-college classroom teachers in the economics content required to teach about the American food system;
4. Plan and carry out a system for stimulating interest among pre-college teachers in using economic analysis in their classrooms;
5. Evaluate the materials and dissemination systems used in this program.

Development of the Big Brown Bag Materials

In May 1978, an agreement was reached with the Food Marketing Institute (FMI) to fund the development of a set of classroom materials on the

economics of the American food system. An outline proposing four units was approved by FMI. The conceptualization of the materials and their format, writing of the content and student activities, review, and editing went on until October 1981. The overall goal of these materials is to:

1. Acquaint students with food choices available to and required of consumers and producers;
2. Examine food consumption and production alternatives;
3. Analyze the consequences of such choices;
4. Use economics as a tool in the decision-making process;
5. Provide students with an overview of, and some of the basic facts about, our food system and our economic system.

The materials are organized into four units with the following objectives:

Unit 1

- To describe the process of food production, distribution, and marketing in the United States;
- To introduce basic economic concepts.

Unit 2

- To understand the interaction of supply and demand in the market as it relates to price as the allocating mechanism;
- To integrate knowledge of the steps in food production, distribution, and marketing with the price mechanism;
- To relate food prices to prices of other non-food items.

Unit 3

- To explain the foundations for sound consumer decision making in the food marketplace;
- To integrate nutritional and economic principles in the purchase of foods.

Unit 4

- To apply the concepts previously learned to some current issues.

The format for each unit is similar and contains the following items:

1. Teacher background
2. Bibliography
3. Student activities
 - a. Learner objectives
 - b. Instructions
 - c. Activity sheets
 - d. Discussion questions
 - e. Extension activities.
4. Vocabulary matching exercises

The "Introduction" to "The Big Brown Bag" summarizes the contents of this teaching package. In addition, this section contains a content matrix showing the use of economic concepts drawn from the JCEE's *Master Curriculum Guide*, Part 1, *A Framework for Teaching Economics: Basic Concepts*. It also contains a test specification matrix examining the concept coverage within the two test instruments.

Dissemination of the Materials and Teacher Training

Once "The Big Brown Bag" materials were near completion, efforts concentrated on their dissemination and use by classroom teachers in the upper elementary and middle school grades. No matter how good classroom materials may be, they cannot teach the students anything without the support, reinforcement, and input of the classroom teacher. Because of the heavy economic content in these materials, it was decided that their optimal use would be by teachers previously trained in basic economics. Therefore, publicizing the materials through the JCEE networks (Council, Center, and DEEP) seemed the best alternative. Once funding had been obtained from the Food Marketing Institute (FMI) for printing and distribution of the materials to the JCEE network, the FMI agreed to fund a series of one-day conferences concentrating on "The Economics of the American Food System."

In order to multiply the effect of these conferences and to localize the use of "The Big Brown Bag" throughout the country, it was determined that individual councils or centers should coordinate training workshops in their own servicing area. Thus Requests for Proposals (RFPs) were sent to all JCEE Councils and Centers asking them to propose the format and speakers for a one-day conference on this topic. The only stipulation was that a minimum of two hours must be allotted to a presentation by the author on "The Big Brown Bag." In return, the council or center would receive up to a thousand dollars to assist with expenses. A total of fifty-six proposals was received—all involving a variety of formats or resource speakers. Of this total, twelve have presently been funded, and funds are being sought for the remainder.

The agendas for these conferences illustrate the value of local planning and coordination. The councils or centers selected local representatives of the food system, or local university personnel, to speak on a wide variety of issues. In addition, the council or center director responsible for the conference serves as a continuing resource person for those teachers who participate.

From the outset, evaluation of the project's components was built in, so that evidence could be provided at each step as to that step's contribution to the whole. Both formative and summative evaluations were used.

As "The Big Brown Bag" materials were being developed, "outside" reviewers were asked to examine the drafts and provide comments for revision. Two DEEP coordinators and an economist were engaged in this aspect of the formative evaluation. An elementary teacher was also employed to field test the materials and activities in the classroom in order to get direct evidence on teacher and student acceptance prior to final editing and publication.

Once the finished product was available, a nationwide field test was set up, again by RFP, to the council and center network. From the responses to the RFP, ten sites were chosen to conduct a materials review and classroom testing of "The Big Brown Bag."

Nearly all of these councils and centers are still engaged in the process of completing the materials review and classroom testing at this writing, but the Florida State University Center's review is complete and available for analysis.

Part I of the Florida State University (FSU) evaluation report contains critical reviews of "The Big Brown Bag" prepared by professors of education and economics and social studies supervisors and teachers throughout the state of Florida. To quote from the report by Dr. Rodney F. Allen, "All would use at least part of 'The Big Brown Bag,' and almost all would recommend its use to teachers at the appropriate grade level. Given the diversity of reviewers, the evaluations in sum were overwhelmingly favorable." In addition to the longer review, six other FSU evaluators completed a shorter review form, the essence of which is reproduced in Table 1.

Finally, the FSU report includes a field test in the classroom. "The Big Brown Bag" was field tested by Dr. Patricia Tolbert, fifth-grade teacher at the Developmental Research School, Florida State University. The children in this school are selected on proportions which reflect the population of Florida by race, ability, and socioeconomic status. Two classes—totaling fifty children—were involved in the test use of the materials, with positive results, according to Dr. Tolbert and Dr. Allen, the evaluation coordinator. Each class of twenty-five students was pre- and post-tested using the fifteen-item, multiple-choice instruments provided in "The Big Brown Bag" materials. The quantitative results are shown in Table 2.

Both classes improved significantly (after a total of twenty hours of class time spent on the materials). Class I had an absolute gain of 2.58 points, while Class II had an absolute gain of 2.12 points. In relative terms, the gains were 38.9 percent (from the pre-test mean) for Class I, and 38.4 percent for Class II. Moreover, these substantial gains were achieved despite the fact that the class used only 50 percent of the Student Activities contained in "The Big Brown Bag" (activities 1, 3-7, 9-11, and 15).

On specific activities, Dr. Tolbert made the following comments:

Activity 1: "Students on the average did outstanding work on this activity.

All were involved in researching the information."

Activity 3: "Very high student interest—may be too unchallenging to older kids."

Activity 6: "Students named this as their favorite activity. I think everyone now understands laws of supply and demand."

Activity 10: "Students were highly motivated to complete this activity."

Activity 11: "Despite the fact the dittoes had to be completed at home, participation was almost 100 percent, indicating a high level of interest."

With these preliminary results from the national field tests, we conclude

TABLE 1

	Rating*					$\bar{X}$
	5	4	3	2	1	
1. Are objectives clearly stated?	3	2	1	0	0	4.33
2. Are objectives realistic in terms of student maturity at the specified age/grade level?	1	4	1	0	0	4.00
3. Are teaching procedures easily understood?	2	4	0	0	0	4.33
4. Are teaching procedures appropriate for accomplishing objectives?	1	4	1	0	0	4.00
5. Are teaching procedures appropriate for students at this age/grade level?	3	1	1	0	0	4.40
6. Does the material contribute to students' understanding of the economic concepts it is designed to teach?	4	1	0	1	0	4.33
7. Are the evaluation instruments accurate and reliable?	0	1	3	0	0	3.25
8. Is the "teacher background" material helpful in teaching the unit?	3	1	0	1	0	4.20
9. How did you find the material overall in terms of effectiveness for achieving the stated objectives?	2	2	2	0	0	4.00

*5 = most positive.

TABLE 2

	Pre-Test				Post-Test			
	$\bar{X}$	σ	S.E.M.	N	$\bar{X}$	σ	S.E.M.	N
Class I	6.64	1.62	1.82	25	9.22	1.86	1.73	23
Class II	5.52	2.30	1.68	25	7.64	2.33	1.77	25

TABLE 3

Conference	Rating	
	Question 6	Question 9
CUNY, Queens College	3.75	3.71
West Texas State, Amarillo	3.44	3.41
IUPUI Center	3.77	3.69
CSU—Hayward Center	3.85	3.59

that "The Big Brown Bag" materials are, by themselves, an effective educational tool for classroom use. Objectives 3 and 4 of the total program, however, called for the planning and execution of systems for training classroom teachers in the economics content behind the American food system and for stimulating interest among teachers in using economic analysis in their classrooms. To accomplish these objectives, a series of one-day conferences on the economics of the American food system was funded by FMI and individual member firms of FMI. As of June 29, 1982, a total of ten such conferences had been conducted plus one workshop session at a major regional professional association meeting. To date, well over three hundred teachers have been exposed to "The Big Brown Bag" materials in these workshops.

Beginning with the Queens College Center conference, held on May 12, 1982, a one-page participant questionnaire was included in the packet of supplementary handouts distributed at the one-day conferences. Although the questionnaires included both subjective comments and quantifiable responses, only the quantifiable responses (on a scale from 0 = "waste of time" to 4 = "very beneficial") are listed in Table 3 as a mean response:

The mean of the means for these two questions were 3.70 for question 6 and 3.60 for question 9. Again, the subjective responses to the open-ended questions confirm these quantitative responses and add considerable color to the assessments of the materials and the conferences. We feel that this evaluation indicates the overall program is successful. The materials, the dissemination program, and the evaluation design appear to have fulfilled the goals of the project thus far and have contributed significantly to the enhancement of student and teacher economic literacy.

GOOD IDEAS IN BRIEF: OPEN CATEGORY

HELEN M. WELLS and STANLEY K. WELLS, respectively a third-grade teacher in *Charleston, Arkansas*, and a fifth-grade teacher at *Echols Elementary School, Fort Smith, Arkansas*, developed a project entitled, "The

Country Mouse and the City Mouse Study Economics." The Country Mouse was Ms. Wells's third-grade class in the rural town of Charleston, and the fifth-grade class at Echols Elementary taught by Mr. Wells was the City Mouse. The main objective of this project was to provide the students in each class with an understanding of their community and to make economic comparisons between the two communities—one rural and the other urban. The first phase of the project included the teaching of economic terminology, such as economics, needs and wants, goods and services, factors of production, natural resources, assembly line, mass production, division of labor, specialization, interdependence, producer and consumer, decision making, mediums of exchange, and technology. The economic comparison was made as the students studied fifteen specified areas, which included location, history, government, education, jobs and industry, agriculture, public service, utilities, health services, communication, stores and businesses, savings institutions, transportation, recreation, and churches. Resource people, field trips, worksheets, television programs, filmstrips, films, posters, and games were used to teach the economic terms and to make the economic comparisons. As a major aspect of the project, students in the two classes wrote to each other as pen pals and shared the economic activities in which they were engaged.

STAN BENNETT of the *Institute for Child Study, University of Maryland, College Park, Maryland*, designed the "Micro-Place Social Studies Curriculum" as a simulation/miniaturization to teach concepts in economics, law, and careers by immersing students for an entire school semester in an ongoing, fully articulated market economy and democratic political system. Students who participated in the "Micro-Place" became entrepreneurs or employees and acquired "families" for whom they had to provide food, clothing, and shelter. An election was held to determine who would serve as mayor, judges, council, and school board members. Laws were enacted and budgets formulated. Court cases were tried and taxes collected. To meet the needs of their families, students opened food processing companies, grocery stores, clothing and manufacturing companies, department stores, real estate companies, and banks. Those students who did not start enterprises completed resumes and applied for jobs with a "Micro-Place" entrepreneur. The buying and selling of food, clothing, and shelter cards was used as a vehicle to introduce and teach such concepts as supply, demand, scarcity, and opportunity cost. Unlike most other approaches to the building of miniature societies in the classroom, "Micro-Place" students were not paid for doing school work; teachers were instead paid by students, via the elected "Micro-Place" board and council. The "Micro-Place Curriculum" also provided more specific step-by-step instruction for implementing the program than others which had been previously available. Another unique feature of the project was the music specifically written to reinforce the economics concepts presented. Pre- and post-tests were administered to 50 "Micro-Place" student participants and to a comparable group of 250 nonparticipants. In the two test instruments ad-

ministered, students involved in the "Micro-Place Curriculum" scored significantly higher than did students in the control classrooms. Students indicated a high degree of satisfaction with the "Micro-Place Curriculum." When asked what each will remember most, one student replied, "I think I will remember most how to live and how it's not as easy as you might think to buy five pairs of pants for everyone in your family."

CAROL F. HIERONYMUS, career education coordinator at *Margate Elementary School, Margate, Florida*, organized the unit, "American Free Enterprise: Past and Present," which was designed to create an awareness among students of the great strides made in our country since colonial times in production, distribution, and consumption. The entire school population, teachers and 630 students in grades K-5, were involved in the project. The effort revolved around six schoolwide assembly programs in which the students conducted the planning and executed a project in class. Students became involved in a variety of activities which included participation as speakers and actors in the assembly programs; writing and producing commercials; drawing and painting magazine and billboard-type advertisements; brainstorming possible ways to improve products; promoting the sale of the products through a variety of advertising strategies; creating inventions; and, finally, as a class, choosing to produce a product in the manner of the seventeenth, eighteenth, or nineteenth century, or to produce a product through the formation of an enterprise organized as a modern corporation, using assembly line production and modern marketing techniques. The faculty was involved on an individual basis as they directed activities in the course of managing their classrooms. For example, the art teacher assisted in the production of products which required skill in arts and crafts. Resource people provided valuable insights, suggestions, and encouragement, and parents became directly involved as they assisted the individual classrooms where younger students were participants. The project ended in early May with an American Free-Enterprise Day during which classrooms displayed their products, indicating for each the raw materials used, the process of production, and the finished product. Classes sold their products to fellow students, parents, and others in the community.

JUDY NICHOLS, a teacher in the *Bay Crest Elementary School, Tampa, Florida*, organized a unit called, "The Freddy the Frog Travel Association, Inc.," for gifted children in grades two to five. The basic goal of the project was to create a travel agency in the form of a corporation in an effort to make a profit. Using a large green stuffed frog as the motivating force, the travel agency, which operated out of the school's library, planned make-believe trips to different countries. The project served as part of a schoolwide cultural awareness program. The main objectives of the unit were to develop an understanding of how corporations function in a free-enterprise system; to provide opportunities for pupils to make decisions relating to planning a fictitious trip, buying services, and purchasing durable and nondurable goods; to

understand the production, distribution, and marketing of travel services; to develop an awareness of the exchange of goods and services through money and barter; and how wants, needs, preferences, and tastes, time requirements, climate, and budgets influence consumer choices in travel planning. Initially, the nine students in the gifted class visited a travel agency to learn how such agencies operate. In the process, the students made "pretend" reservations on the agency's computer. Following this experience, they selected a country they wanted to visit, made brochures, and planned an imaginary trip using commercial travel brochures and airline schedules. Next, they set up their own travel agency in the school library, established business hours, and started an advertising campaign. The students then started to function as a corporation, and they began to plan trips for other students in the school, each of whom was given a "budget" of fifteen hundred dollars to cover travel and three hundred dollars for clothing. Each "customer" was presented with a wide range of economic choices based on current travel fares, and each consumer chose a mode of transportation, accommodations, a length of stay, special tours, the use of credit or cash, and other matters related to travel. "Agents" used the adding machine to compute costs which included a 4 percent sales tax; they also completed sales receipts and issued tickets. As part of the schoolwide project, each consumer also made a travel brochure about the place which would be visited. The brochure included interesting facts, the kind of money required, wardrobe needs, and so on. At the end of the project, the Board of Directors of the corporation added total sales, paid the costs incurred through travel and other related items, and paid dividends to the students who were shareholders.

SARA BOONE BAIRD, coordinator of economic education at *The Collegiate Schools, Richard, Virginia*, combined successful economic education programs from the preceding year with expanded activities and additional projects to add new dimensions to her master five-year plan for Collegiate. To encourage teachers to include economics in the curriculum and to assist other schools, "The Marketplace in the Classroom" was developed and presented at a professional conference for independent schools. Slides, transparencies and videotapes were used to illustrate teaching strategies, as five basic economic concepts—scarcity, wants, choice, consumer, producer—were presented with activities suitable for teaching at levels from kindergarten through fifth grade. To increase the economic understanding of teachers in the Richmond area, a tuition-free, on-campus graduate course in principles of economics was offered, and teachers developed units of study. Economic concepts appropriate for teaching in levels K-4 were included in a revised social studies curriculum with grade levels designated for introduction, teaching, and reinforcement. New textbooks were selected for economics content. An economist was in residence for Economic Emphasis Week, a comprehensive five-day program in which 1,350 students had an opportunity to learn about the American economic system. University professors were guest lecturers in English,

government, history, and foreign policy classes, and daily assemblies featured business executives and political leaders as guest speakers. A visiting master economics teacher, special economics films, simulations, contests, and plays increased the economic awareness of elementary students. Three teachers won awards for outstanding teaching of economics in the Public Utilities of the Virginias competition, and the coordinator won state and national recognition. Students in Collegiate's model program, sponsored by the E. Angus Powell Endowment for American Enterprise, gained a better understanding of the American economic system, the roles they play in the system, the interrelationship of economic freedom and political freedom, and the tremendous impact each has on the other.

LOUISE T. BELL, a teacher in the *Silbernagel Elementary School, Dickinson, Texas*, developed a unit, "Enterprising Economics," which incorporated the idea of a "Turkey Fest" in order to stimulate student interest and involvement in the study of economics. Inspired by the impetus provided by gifted and talented classes, grade level teams established corporations; each was expected to produce a good or service for the "Turkey Fest." Each corporation was allocated space in the school gymnasium to operate a booth over the two days of the "Turkey Fest." Criteria for developing each booth were: (1) all students, including special education, hearing-impaired and bilingual, had to be participants, and (2) the good or service produced had to be related to the learning process. Each corporation developed a plan for its booth, issued and sold stock, made an action plan to carry out its ideas, purchased needed supplies, and readied its booth. Economic terms were introduced in spelling, math problems were related to computing profit and loss, writing assignments revolved around advertising, and music classes put new words to old music or wrote new music in the form of jingles to advertise booths. There were eighteen booths in all, and since each student was limited to buying ten tickets at ten cents each, decisions about where the tickets were to be spent had to be made. Parents served as consultants for the project, and the bilingual classes were involved in teaching other students to count in Spanish, and so on. Evaluations of the project indicated that students had a realistic "hands-on" learning experience as they learned about supply and demand when they ran out of prizes or realized that losses would result from overinvestment in supplies. All the varied activities included in the project served to make a lasting impression on the students as they formed their corporations, organized and operated their booths, and entered into the world of economics.

SISTER PATRICIA STEPPE, a teacher at the *Academy of the Sacred Heart, St. Charles, Missouri*, organized a project which included all the children in grades K-8 and was designed to study economic concepts, the free-enterprise system, and the stock exchange. The program was structured to provide the opportunity for pupils to work independently or in groups, depending upon their levels of sophistication. During the project, the school community

functioned as a mini-community of producers and consumers, supplying its needs, competing in business, investing earned income and wages, earning profits or incurring losses, and experiencing the need for mergers and incorporation. The activity was organized over a four-week period. In the first week, the children read displays, reviewed filmstrips, and completed assignments. As they developed an understanding of key economic concepts and principles, the students became involved in activities related to banking, employment, investment, and the operation of businesses. For each activity completed, a predetermined amount of dollar income was awarded. In the second week, students organized and operated a bank and established a stock exchange; both served to provide alternatives for investing earned income and profits. For those who wanted to go into business, a Chamber of Commerce was formed and a shopping mall created; these were added during the third week. The final week was not pre-planned. By this time, however, the pupils were thoroughly involved in the project, and such activities as property taxes, business regulations, fines, mergers and incorporations, and the involvement of the "Better Business Bureau" were introduced. All study and research for the unit was done independently, outside of the classroom and during available free time. Information was posted in the hallways of the school, and this was accompanied by study sheets, bonus questions, and activities related to the making of charts and graphs. The project was scheduled during "Economic Month," an annual activity at the school during the past ten years.